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CONTENTS

| | Page |
|---|------|
| CONNECTICUT LAW AND REGULATIONS REGARDING COMMERCIAL FERTILIZERS | 3 |
| Official definitions of fertilizer terms and materials | 4 |
| REGISTRATIONS | 4 |
| FERTILIZER INSPECTION FOR 1961 | 23 |
| CLASSIFICATION OF FERTILIZER MATERIALS AND FERTILIZER TONNAGE | 24 |
| Mixed fertilizer tonnage | 25 |
| I. Materials chiefly valuable for nitrogen | 26 |
| II. Materials chiefly valuable for phosphoric acid | 26 |
| III. Materials chiefly valuable for potash | 26 |
| IV. Materials supplying nitrogen and phosphoric acid | 26 |
| V. Materials supplying nitrogen and potash | 26 |
| VI. Mixed fertilizers: | |
| Commercial mixtures | 26 |
| Special and home mixtures | 27 |
| State purchases of fertilizer | 27 |
| VII. Miscellaneous: | |
| Sheep and cattle manures | 27 |
| Limestone and similar materials | 27 |
| Fertilizers sold in small packages | 27 |
| Other miscellaneous materials | 28 |
| Check meals and fertilizers | 28 |
| MAINTENANCE OF GUARANTIES | 28 |
| TABLES OF ANALYSES: | |
| 1. Materials supplying chiefly nitrogen | 29 |
| 2. Superphosphate, etc. | 36 |
| 3. Potash salts, etc. | 39 |
| 4. Ground fish, bone, etc. | 42 |
| 5. Mixed fertilizers | 44 |
| 6. Sheep and cattle manure | 72 |
| 7. Small package fertilizers | 76 |
| 8. Other miscellaneous materials | 86 |
| INDEX | 87 |

REPORT ON INSPECTION AND ANALYSIS OF COMMERCIAL FERTILIZERS

1961

H. J. FISHER, Chief Chemist¹

CONNECTICUT LAW AND REGULATIONS REGARDING COMMERCIAL FERTILIZERS

The term "commercial fertilizers", as used in the Connecticut fertilizer statute, includes "any and every substance imported, manufactured, prepared or sold for fertilizing or manuring or soil amendment purposes, except barnyard manure and stable manure which have not been artificially treated or manipulated, marl and lime." An amendment of the law in 1949 permitted fertilizers to be labelled with guaranties of elements other than nitrogen, phosphorus and potassium, but did not change the requirement that mixed fertilizers must contain at least 0.82 per cent of nitrogen, and 1 per cent of either phosphoric acid or potash, for guaranties of these elements to be made. Phosphorus must be declared as available phosphoric acid (except in the case of bone, tankage and other natural organic materials, where total phosphoric acid is guaranteed), and potassium as water-soluble potash; all other elements must be guaranteed in terms of percentages of the elements, not as oxides or salts. A registration fee of \$10.00, payable annually, is charged for each element guaranteed in each brand of fertilizer; there is also a six cent tonnage tax, payable semi-annually.

While manufacturers usually register their own fertilizers, if a retailer sells a fertilizer manufactured by an out-of-state firm, and that firm refuses to register, under the law the retailer is responsible for registration fees and tonnage taxes. The retailer, therefore, should assure himself that the requirements of the law have been met by the manufacturers of the brands which he handles, or himself be prepared to meet all these requirements.

The law exempts from registration, and from other requirements, only: (1) fertilizers passing through the State in transit; (2) fertilizers and fertilizer materials shipped to regular fertilizer factories to be used for manufacturing purposes; and (3) fertilizers and fertilizer chemicals sold to The Connecticut Agricultural Experiment Station for experimental purposes.

Cottonseed, linseed, peanut and soybean oil meals, when sold or used for fertilizer purposes, must be registered as fertilizers and the specified fees paid there-

¹ Analyses were made by Messrs. Richard A. Botsford, Sherman Squires, Werner Mueller and Walter Oliver and Miss Helen Kocaba; inspection and sampling by Mr. R. Richard Nichols; compilations by Miss Evelyn Caputo and Mrs. Margaret Krause.

on. For such products the registration fee is \$10.00 per brand. This fee and the tonnage tax are entirely apart from the registration fee required by the feeding stuffs law for vegetable meals used as feeds (there is no tonnage tax on feeds).

Because manufacturers or jobbers do not know how much, if any, of their vegetable meal tonnage is sold or used as fertilizers, local dealers and purchasers report their sales or purchases to this Station. This information is not for publication but is used to inform manufacturers of the total sales of their meal as fertilizer in this State. It is expected that the fees provided for by statute will be paid by the manufacturer or other party responsible for the brands.

OFFICIAL DEFINITIONS OF FERTILIZER TERMS AND MATERIALS

It is expected that fertilizers sold in this state will comply with the regulations and standards of the Association of American Fertilizer Control Officials. A copy of the "Official Publication" of that Association giving these definitions and regulations may be obtained from the secretary-treasurer, B. D. Cloaninger, Drawer 392, Clemson, South Carolina, for \$2.00.

REGISTRATIONS

For 1961, 115 firms and individuals registered 523 brands of fertilizer at this Station for sale in the State. As required by statute, the brands are listed as follows:

A-PENN. OIL CO., Butler, Pa.

(Registered by International Minerals & Chemicals Corp.,
Woburn, Mass.)

Marvel Green Lawn Builder Complete Lawn Food

AGRICULTURAL PRODUCTS CO., 589 Atwells Ave., Providence,
R. I.

APCO Organic Lawn Food
Blue Ribbon 5-10-5 Fertilizer Lawn-Garden
Golden Comet 8-6-4 Lawn Food
Guardian Gro Green Lawn Fertilizer
Super Turf King 8-6-4 Lawn Food
Turf King Lawn & Garden Fertilizer 6-10-4

AGRICULTURAL SUPPLY CO., 221 Richmond Ave., West Haven,
Conn.

Yale Special Mixture

ALLIED CHEMICAL CORP., Nitrogen Division., P.O. Drawer 61,
Hopewell, Va.

"Arcadian" A-N-L- Fertilizer Compound
"Arcadian" Golden Uran 30 Solution
"Arcadian" Golden Uran 32 Solution
"Arcadian" Nitrana Solution 2
"Arcadian" Nitrana Solution 3
"Arcadian" Nitrana Solution 4
"Arcadian" Nitrate of Soda
"Arcadian" Pelleted Ammonium Nitrate
"Arcadian" Urea 45 Fertilizer Compound (Pelleted)

AMERICAN AGRICULTURAL CHEMICAL CO., 285 River St., Na
Weymouth 91, Mass.

AA Fertilizer 0-15-30
AA Fertilizer 0-20-20
AA Plant Food 5-10-5
AA Fertilizer 5-10-10 with 1.2 Magnesium
AA Fertilizer 8-16-16
AA Fertilizer 10-6-4
AA Fertilizer 10-10-10
AA Fertilizer 15-10-10
AA Quality Fertilizer 5-10-10
AA Quality Fertilizer 7-7-7
Agrico A. C. R. Fertilizer 6-10-4
Agrico African Violet Plant Food 17-17-17
Agrico Country Club 6-10-4
Agrico Country Club 8-6-4
Agrico Country Club Fertilizer 12-4-8
Agrico Country Club U. F. 10-6-4
Agrico for Aroostook 10-15-15
Agrico for Corn 8-16-16
Agrico for Gardens 5-10-5
Agrico for Lawns, Trees & Shrubs 6-10-4
Agrico for New England 5-8-7
Agrico for Potatoes 5-10-10 with 1.2 Magnesium
Agrico for Seeding Down 5-20-20
Agrico for Topdressing 7-7-7
Agrico for Topdressing 15-10-10
Agrico for Turf 6-8-2
Agrico for Turf - Grass Food 10-6-4
Agrico House Plant Food 17-17-17
Agrico Insect Control with Fertilizer
Agrico Phosphate & Potash 0-15-30
Agrico Phosphate & Potash 0-20-20
Agrico Rose Food 5-9-6
Agrico Weed Control with Fertilizer
Agrinite
Agri-Phos 20% Superphosphate
Homestead Complete Grass Fertilizer

AMERICAN AGRICULTURAL CHEMICAL CO., 285 River St., No.
Weymouth 91, Mass. - Cont.

Homestead Farm Style Multi-Purpose Fertilizer 5-10-5
Phosphate Rock
Superphosphate, 18% Normal

AMERICAN CYANAMID CO., P. O. Box 333, Princeton, N. J.

AERO Cyanamid, Granular
AERO Cyanamid, Special Grade
AERO-PHOS Florida Natural Phosphate 31%
AERO-PHOS Florida Natural Phosphate 33%
AERO Phosphoric Acid
AEROPRILLS, Ammonium Nitrate Fertilizer
AERO Urea
Amanol Solutions
Trebo-Phos Triple Superphosphate

ARCHER-DANIELS-MIDLAND CO., 700 Investors Bldg.,
Minneapolis 2, Minn.

Archer Quality 44% Protein Solvent Extracted Soybean Oil
Meal

ARMOUR AGRICULTURAL CHEMICAL CO., Box 10, Carteret, N. J.

Armour Armorganic Plant Food
Armour Big Crop Fertilizer 5-8-7
Armour Big Crop Fertilizer 5-10-5
Armour Big Crop Fertilizer 5-10-10
Armour Big Crop Fertilizer 8-16-16
Armour Big Crop Fertilizer 10-10-10
Armour Big Crop Superphosphate
Armour Bone Meal Fertilizer
Armour Cattle Manure
Armour Gold Bond Tobacco Grower
Armour Home & Garden Special
Armour Lawn Special
Armour Sheep Manure
Armour Vertagreen All Soluble Plant Starter
Armour Vertagreen Complete Plant Food for Commercial
Crops 6-8-8
Armour Vertagreen Complete Plant Food for Commercial
Crops 10-10-10
Armour Vertagreen for Acid-Loving Plants 5-10-10
Armour Vertagreen for Lawns & Gardens 5-10-5
Armour Vertagreen Plant Food 5-10-5
Armour Vertagreen Plant Food for Commercial Crops
3-12-12
Armour Vertagreen Plant Food for Commercial Crops
6-12-12
Armour Vertagreen Plant Food for Commercial Crops
Tobacco Special 6-4-7

ARMOUR AGRICULTURAL CHEMICAL CO., Box 10, Carteret,
N.J. - Cont.

Armour Vertagreen Plant Food for Turf & Trees 10-6-4
Armour Vertagreen Rose Food 5-10-5
Armour Vertagreen Turf Food with Chlordane 10-6-4
Armour Vertagreen Turf Formula 8-6-2 (50% Organic
Nitrogen)

ASGROW SEED CO., 272 George St., New Haven, Conn.

Gro-Sod Lawn Food
Purge
Weed-Nix Lawn Food

ATKINS & DURBROW, INC., Box 55, Port Colborne, Ontario, Canada

Driconure 3-2-2

F. A. BARTLETT TREE EXPERT CO., 2770 Summer St., Stamford,
Conn.

Bartlett Green Tree Food

BLACKSTONE GUANO CO., INC., 2000 Chesapeake Ave.,
Baltimore 26, Md.

Blackstone Fair Lawn 25% Organic
Blackstone Living Lawn
Blackstone Ranch Home

BONNIE GREEN PRODUCTS CO., Front & Bainbridge Sts.
Philadelphia 47, Pa.

Bonnie Green Complete Lawn & Garden Food 16-8-9

BOOHER LUMBER CO., INC., Nedrow, N. Y.

Timberturf

THE BORDEN CO., Chemical Div., 350 Madison Ave., New
York, N. Y.

Borden's "38"

JOSEPH BRECK & SONS, 401 Summer St., Boston 10, Mass.

Breck's Feed No Weed with 2, 4-d plus 2, 4, 5-T
Breck's Garden-Gro
Breck's Greenite (all organic)
Breck's New Improved Turf-Gro
Breck's Quick-Life
Breck's Turf-Gro

THE BRODE CORP., Box 700, Memphis, Tenn.

Owl Brand 41% Prime Cottonseed Meal

BROOKSIDE NURSERIES, INC., 228 Brookside Rd., Darien, Conn.

Brookside's Dried Blood
Brookside's Natures Nutrients
Brookside's Raw Bone Meal

W. ATLEE BURPEE CO., 18th & Hunting Park Ave., Philadelphia, Pa.

Burpee Lawn Food 20-10-5

CADWELL & JONES, INC., 199 Walnut St., Hartford, Conn.

C & J Hi-Organic Fertilizer 10-6-4
C & J Lawn Food with Weed Killer
C & J Plant Food 5-10-5
Lighthouse Brand Fish Meal

CALIFORNIA CHEMICAL CO., Ortho Div., Lucas and Ortho Way, Richmond 4, Calif.

Ortho-Gro Liquid Plant Food 10-5-5
Ortho-Gro Liquid Plant Food 15-5-5
Ortho Lawn Groom
Ortho Liquid Evergreen & Azalea Food 10-8-7
ORTHO Liquid Rose Food 8-12-4
ORTHO Prilled Ammonium Nitrate Fertilizer
ORTHO UNIPEL 10-20-20 Pelleted Fertilizer
ORTHO UNIPEL 14-14-14 Pelleted Fertilizer
ORTHO UNIPEL 16-48-9 Pelleted Fertilizer
ORTHO UNIPEL 20-20-0 Pelleted Fertilizer

CARBOLA CHEMICAL CO., INC., Natural Bridge, N. Y.

Carbola CCC Triple 20 Plant Food

PETER CASCIO NURSERY, INC., 2600 Albany Ave., West Hartford, Conn.

Cascio's High Organic 10-6-4 Lawn Food
Cascio's Organite
Cascio's Professional 5-10-5 Lawn Food

CHILEAN NITRATE SALES CORP., 120 Broadway, New York 5, N. Y.

Chilean Nitrate of Soda - Champion Brand
Chilean Nitrate of Soda - Potash - Champion Brand

COLORO-SPRAY CORP., 2215 N. American St., Philadelphia 33,
Pa.

Cloro-Spray
Fairway-Spray 15-10-5

COCKE & CO., 208 William Oliver Bldg., Atlanta 3, Ga.

Cocke-Sure Brand Prime Quality 41% Protein Cottonseed
Meal
Expello Brand 41% Protein Cottonseed Meal or Cake Prime
Quality

CONSOLIDATED RENDERING CO., 178 Atlantic Ave., Boston 10,
Mass.

Corenco 0-15-30
Corenco 0-15-30 with Boron
Corenco 0-20-20
Corenco 0-20-20 with .11 Boron
Corenco 5-8-7
Corenco 5-10-5
Corenco 5-10-5 Home Garden
Corenco 5-10-5 Rose Special
Corenco 5-10-10
Corenco 5-10-10-1.2
Corenco 5-10-10 Liquid Fertilizer Concentrate
Corenco 6-3-6 Perfection
Corenco 6-3-6 Premium
Corenco 6-8-8-1.2
Corenco 6-8-8 Potato Special
Corenco 7-7-7
Corenco 7-7-7 Rhododendron
Corenco 8-6-4 Landscape
Corenco 8-6-4 Turf Green
Corenco 8-12-12-.9
Corenco 8-16-16
Corenco 10-5-5 Liquid Green
Corenco 10-6-4 Golf & Lawn
Corenco 10-8-2 Timberline
Corenco 10-10-10
Corenco Cottonseed Meal
Corenco Granular Form Fertilizer 10-6-4
Corenco Green-O-Ganic
Corenco Ground Bone
Corenco Organic Turf Fertilizer
Corenco Sheep Manure with Inert matter
Corenco Sparz-on
Corenco Superphosphate 20%
Muriate of Potash
Organo
Sulphate of Potash

THE DAVEY TREE EXPERT CO., 117 S. Water St., Kent, Ohio

Davey Shredded Cattle Manure
Davey Tree Food

DAVISON CHEMICAL CO., Div. W. R. Grace & Co., Hill Plant,
Baltimore 26, Md.

0-15-30 Davco Granulated Fertilizer
0-20-20 Davco Granulated Fertilizer
5-10-5 Davco Granulated 3G Fertilizer
5-10-10 Davco Granulated 3G Fertilizer
8-16-16 Davco Granulated 3G Fertilizer
10-6-4 Davco Granulated 3G Fertilizer
10-10-10 Davco Granulated 3G Fertilizer
15-10-10 Davco Granulated 3G Fertilizer
Davco Granulated 20% Superphosphate
Turf and Garden Food 5-10-5

DAYTON FERTILIZER CORP., Georges Rd., Dayton, N. J.

Grand Garden Plant Food 6-10-4
Lawn Treat 5-10-5
Lawn Treat 10-6-4
Lightweight Lawn Treat

THE DOUGHTEN SEED CO., 253 Brunswick St., Jersey City 2,
N. J.

Doughten's Lawn Food 9-8-3

E. I. DU PONT DE NEMOURS & CO., 6054 Du Pont Bldg.,
Wilmington, Delaware

Du Pont Nu Green Fertilizer Compound
Du Pont Soluble Plant Food 19-22-16
Du Pont Turf Food 20-10-10
Du Pont Turf Food 20-10-10 with 2,4-D Weed Killer
Du Pont Uramite Fertilizer Compound
Du Pont Uramite M Fertilizer Compound
Du Pont Urea Nitrogen Fertilizer

EASTERN STATES FARMERS' EXCHANGE, INC., 26 Central St.,
West Springfield, Mass.

Eastern States 0-15-30 with .3 Boron
Eastern States 0-15-30 W/B with 0.3% Heptachlor
Eastern States 0-25-25
Eastern States 5-10-10 SM with 1.2 Magnesium
Eastern States 8-16-16 with .6 Magnesium
Eastern States 10-6-4
Eastern States 10-10-10 with .6 Magnesium

EASTERN STATES FARMERS' EXCHANGE, INC., 26 Central St.,
West Springfield, Mass. - Cont.

Eastern States 10-10-10 LC with 1.2 Magnesium
Eastern States 10-15-15 with 1.2 Magnesium
Eastern States 10-15-15 LC with 1.2 Magnesium
Eastern States 10-20-10 with .6 Magnesium
Eastern States 15-10-10
Eastern States 15-15-15
Eastern States Green Lawn
Eastern States Muriate of Potash 60%
Eastern States Start-N-Gro
Eastern States 20% Superphosphate

EASTMAN GELATINE CORP., 227 Washington St., Peabody,
Mass.

Dicalcium Phosphate

EDGEWOOD FARMS, INC., Marysville, Ohio

Edgewood Farms Bulb Food
Edgewood Farms Boost
Edgewood Farms Rose Food

ELLAR CHEMICAL DISTRIBUTORS, INC., Route 17, Lodi, N. J.

Ellar's 5-10-5 Best

JOHN W. ESHELMAN & SONS, Lancaster, Pa.

41% Solvent Extracted Cottonseed Meal

THE ESPOMA CO., P. O. Box 431, Millville, N. J.

Bulb-Tone
Espoma Garden
Espoma Organic 3-2-1
Espoma Rose Food
Holly-Tone
Turf-Tone

FAESY & BESTHOFF, INC., 25 East 26th St., New York 10, N. Y.

F & B Azalea-Camellia-Rhododendron Food
F & B Cottonseed Meal
F & B Evergreen Food 7-7-7
F & B Pure Steamed Bone Meal
F & B Rose Food

FARMINGDALE GARDEN LABS, INC., Farmingdale, N. Y.

Farmingdale 10-6-4 Uramite Green Turf

GANSO PRODUCTS LIMITED, 62 Richmond St. W., Toronto,
Canada

GARD-N-STIK 5-4-4
GARD-N-STIK 6-12-12
GARD-N-STIK 12-8-6

THE GARDEN CENTER INC., 53 LaSalle Rd., West Hartford,
Conn.

Garden Center Lawn Fertilizer
Garden Center of West Hartford Lawn Weed Killer & Feed
Granules

GEIGY AGRICULTURAL CHEMICALS, Saw Mill River Rd.,
Ardsley, N. Y.

Sequestrene 138 Fe Iron Chelate
Sequestrene 330 Fe Iron Chelate
Sequestrene Na_2Cu Copper Chelate
Sequestrene NaFe Iron Chelate
Sequestrene Na_2Mn Manganese Chelate
Sequestrene Na_2Zn Zinc Chelate

G. L. F. SOIL BUILDING SERVICE, Div. Cooperative Grange
League Federation Exchange, Inc., 1001 W. Seneca St.,
Ithaca, N. Y.

Squire Applegate "Brite" Lawn Fertilizer
Squire Applegate Garden Care Plant Food with Dieldrin
Squire Applegate Groleaf Garden Plant Food with Organic
Squire Applegate Groleaf Greenlawn with Uramite
Squire Applegate Groleaf Turfood with Chickweed Killer
plus 2, 4-D
Squire Applegate Groleaf Turfood with 2, 4-D Weed Killer
Squire Applegate High Organic Plant Food
Squire Applegate High Organic Plant Food with Dieldrin

GLEN TERRACE NURSERIES, INC., 1960 Whitney Ave.,
Hamden, Conn.

(Registered by The Hubbard-Hall Chemical Co., Waterbury,
Conn.)

Glen Terrace Lawn Food 10-6-4

GODFREY'S GARDEN SHOP, 1630 Post Rd., Fairfield, Conn.

(Registered by The Hubbard-Hall Chemical Co., Waterbury,
Conn.)

Godfrey's Lawn & Tree Food 10-6-4

GOLDENROD OIL MEAL SALES CO., 727 Beale St., Memphis, Tenn.

Goldenrod Brand 41% Protein Cottonseed Meal

GOULARD & OLENA, INC., Skillman, N. J.

G & O Bone Meal
 G & O Evergreen Food
 G & O Food for Bulbs
 G & O Hyganic 10-6-4
 G & O Light Fantastic Lawn Food 20-6-4
 G & O Muriate of Potash
 G & O Nitrate of Soda
 G & O Plant Food for Acid Loving Plants
 G & O Prime Cottonseed Meal 41%
 G & O Prizegro for Gardens
 G & O Rose Food
 G & O Sulphate of Ammonia
 G & O 20% Superphosphate
 G & O Tomato and Fruit Food
 G & O Turf Food & Insecticide 10-6-4 = Chlordane
 Goulard's Formula 8-15-5

W. R. GRACE & CO., Grace Chemical Div., 147 Jefferson Ave. Memphis 3, Tenn.

Grace Urea Prills
 Grace Urea Prills - 46

GRAY CHEMICAL, INC., 105 Maplewood Ave., Gloucester, Mass.

Mer-Made Plant Food

GREEN-D PRODUCTS, INC., 11th & RR Ave., Huntington Sta., N. Y.

Green-D Lawn Food Deluxe 100% Organic Nitrogen 10-6-4
 Green-D 40% Organic Nitrogen Rose Food
 Green-D 10-6-4 50% Organic Nitrogen
 Green-D 60% Organic Nitrogen Azalea Food
 Green-Gro All-Purpose Economy Fertilizer 5-10-5
 Green-Gro Economy Lawn & Turf Fertilizer 10-6-4

HALSTEAD DISTRIBUTING CO., Suttons La., Mt. Kisco, N. Y.

Just Right 5-10-5 for Lawns Gardens and Shrubs
 Just Right Turf Food 10-6-4

THE CHARLES C. HART SEED CO, 304 Main St., Wethersfield, Conn.

Hart's All Organic

THE CHARLES C. HART SEED CO., 304 Main St., Wethersfield,
Conn. - Cont.

Hart's All Purpose Plant Food
Hart's Rose Food
Hart's Turf Food
Hart's Two-For-One

HAYNIE PRODUCTS, INC., 108 East York St., Baltimore 30, Md.

Hi-Seas Menhaden Fish Meal

HERCULES POWDER CO., Hercules Tower, 90 Market St.,
Wilmington 99, Del.

Hercules-Nitroform

HERSHEY ESTATES, Hershey, Pa.

Ko-K-O Meal

A. H. HOFFMAN, INC., Landisville, Pa.

Hoffman Cow Manure (Dehydrated)
Hoffman Sheep Manure (Dehydrated)

GEO. A. HORMEL & CO., Austin, Minn.

Vita Black Blood Meal
Vita-Black Bone Meal
Vita-Black 6-3-3 Specialty Lawn & Garden Fertilizer

THE HUBBARD-HALL CHEMICAL CO., 28 Benedict St., Water-
bury, Conn.

Castor Pomace
Cotton Hull Ashes
Dry Ground Fish
Emerald Green Evergreen Food
Emerald Green Lawn Food
Emerald Green Plant Food
Emerald Green Rose Food
Green Gro Lawn Fertilizer 6-7-4
Green Ribbon All Purpose Plant Food 5-10-5
Green Ribbon Lawn Food 10-6-4
HH Blade Lawn Food with Urea-Form
HH Bone Meal 2-25%
HH Cow Manure
HH Evergreen Food 4-10-4
HH Gro Mor Garden Fertilizer
HH Lawn Fertilizer with Chlordane
HH Luxura Lawn Food with Urea-Form
HH Nitroganic
HH Plant Food

THE HUBBARD-HALL CHEMICAL CO., 28 Benedict St., Waterbury, Conn. - Cont.

HH Rose Food
 HH Sheep Manure
 HH Turf & Tree Food
 HH Weed-Kil Lawn Food with 2,4-D
 Lawn Craft Turf Fert. for Professional Use
 Lawn Craft 8-6-4 Turf Food (50% of N. is Organic)
 Liberty Fertilizer 0-15-30
 Liberty Fertilizer 0-20-20
 Liberty Fertilizer 5-8-7
 Liberty Fertilizer 5-10-5
 Liberty Fertilizer 5-10-10
 Liberty Fertilizer 5-10-10 1.2 mag.
 Liberty Fertilizer 6-8-8-1.2
 Liberty Fertilizer 7-7-7
 Liberty Fertilizer 8-12-12-1.2
 Liberty Fertilizer 8-16-16
 Liberty Fertilizer 10-6-4
 Liberty Fertilizer 10-10-10
 Liberty Fertilizer 15-10-10
 Liberty High Grade Tobacco Fertilizer
 Liberty New Super Spud 1.2 mag.
 Liberty Special Potato Fertilizer 1.2 mag.
 Liberty Super Corn 10-10-10
 Liberty Super Gro 5-10-10-2
 Liberty Super Gro 6-12-12 with 1.2 mag.
 Liberty Tobacco Fertilizer
 Muriate of Potash
 Nitrate of Potash
 Precipitated Bone
 Sulphate of Potash
 Superphosphate, 20%
 Urea 46%
 Woodruff's Lawn & Tree Food

HUMPHREYS-GODWIN CO., 83 S. Front St., Memphis, Tenn.

Dixie Brand 41% Cottonseed Meal
 41% Protein Cottonseed Meal

INTERNATIONAL MINERALS & CHEMICAL CORP., P. O. Box
 230, Woburn, Mass.

Muriate of Potash - Granular
 (Registered by Eastern States Farmers' Exchange, Inc.,
 West Springfield, Mass.)

Sul-Po-Mag
 (Registered by Hubbard-Hall Chemical Co., Waterbury,
 Conn.)

SPENCER KELLOGG AND SONS, INC., 120 Delaware Ave.,
Buffalo, N. Y.

Spencer Kellogg's 32% Protein Old Process (Expeller) Lin-
seed Oil Meal

Spencer Kellogg's 44% Protein Soybean Oil Meal - Solvent
Extr.

KEN-BRIS FARM, INC., 701 South Front St., Philadelphia 47,
Pa.

Society Hill Lawn Feeder
Society Hill Weeder-Feeder

LAWN & GRASS SEEDS, INC., 422 Fulton St., Buffalo 10, N. Y.

Fabulawn Brand Lawn Fertilizer
Fabulawn Brand Weed & Feed

LAWN-TEX, INC., 1640 W. Fulton St., Chicago, Ill.

Organi-Green

LEBANON CHEMICAL CORP., P. O. Box 532, Lebanon, Pa.

Lebanon Azalea Food
Lebanon Bone Meal
Lebanon Cow Manure
Lebanon Fertilizer 5-10-10
Lebanon Hi-Organic
Lebanon Plant Food
Lebanon Rose Food
Lebanon Sheep Manure
Lebanon Truck Crop
Lebanon Turf Organic
Lebanon Uni-Form

LEE PATTEN SEED CO., 360 Ninth St., Jersey City 2, N. J.

Patco's Combo with 2, 4D plus 2, 4, 5T
Patco's Featherweight (Lawn Food)
Patco Lawn Food 9-8-3

THE LIBNER GRAIN CO., 25 Commerce St., Norwalk, Conn.

Libner's Fertilizer Bone Meal

LOFTS PEDIGREED SEED CO., 96 Forrest St., Jersey City, N. J.

Lofts General Purpose 15-10-5
Lofts Lightweight for Turf
Lofts Pedigreed Azalea & Rhododendron Food 5-8-7
Lofts Pedigreed Evergreen Food 5-8-7
Lofts Pedigreed Rose Food 7-11-5

L. B. LOVITT & CO., 314 Cotton Exchange Bldg., Memphis,
Tenn.

"Lovit Brand" 41% Protein Cottonseed Meal Prime Quality

MAEGEO FARMS, Lexington, No. Carolina

Dehydrated Sheep Manure
Fertal-Gro (Dehydrated Cow Manure)

THE MAMLON CO., P. O. Box 3046, New Haven 15, Conn.

FER-MEL General Purpose Plant Food
FER-MEL Lawn Food
FER-MEL Water Soluble Turf & Tree Food

MASS. NURSERYMEN'S ASSOCIATION, 261 Franklin St., Boston
10, Mass.

Plant-O-Ganic
Turf-O-Ganic

MC ARDLE'S SEED CO., 388 Greenwich Ave., Greenwich, Conn.

McArdle's 10-6-4

MC NAIRS FARMS, Fairley St., Laurinburg, N. C.

McNairs' Organure Dehydrated Cow Manure

MONSANTO CHEMICAL CO., 800 N. Lindbergh Blvd.,
St. Louis 66, Mo.

Lion Ammonia Nitrate Fertilizer
Lion Prilled Urea Fertilizer 45-0-0

NATURAL PLANT FOOD CO., 1409 N. W. 50th St., Oklahoma
City, Okla.

Longhorn Brand Cattle Manure
Ramshorn Brand Sheep Manure

NU LIFE PRODUCTS CO., Strong Road, S. Windsor, Conn.

Nu Life (Magic Gro)

OLD FOX AGRICULTURAL SALES INC., 66 Valley St., East
Providence, R. I.

Green Lawn
Old Fox Brand 0-0-60 (Muriate of Potash)
Old Fox Brand 0-15-30
Old Fox Brand 0-20-0 (Superphosphate)
Old Fox Brand 4-16-20

OLD FOX AGRICULTURAL SALES INC., 66 Valley St., East
Providence, R. I. - Cont.

Old Fox Brand 5-10-10
Old Fox Brand 5-10-10-1.2
Old Fox Brand 6-3-6
Old Fox Brand 6-8-8-1.2
Old Fox Brand 6-10-10-1.2
Old Fox Brand 7-7-7
Old Fox Brand 8-10-10-1.2
Old Fox Brand 8-16-16
Old Fox Brand 10-10-10
Old Fox Brand 15-10-10
Old Fox Brand Tobacco Fertilizer 6-3-6-1.2
Old Fox Garden Food 5-10-5
Old Fox No Pest Turf Food
Old Fox Organo
Old Fox Turf Food 8-6-2
Old Fox Turf Food with Ureaform

OLIN MATHIESON CHEMICAL CORP., 32 South St., Baltimore,
Md.

Ammo-Phos
Granulated 20% Superphosphate
Mathieson Pelletized Urea Fertilizer

PAX CO., P. O. Box 2310, Salt Lake City 10, Utah

New Pax Crabgrass and Soil Pest Control
PAX Pride
PAX Snap Bak (for lawns only)

ROBERT B. PETERS CO., 2833 Pennsylvania St., Allentown,
Pa.

Peters Special 13-6-6
Peters Special 20-5-30
Peters Special 20-20-20
Peters Special 25-10-10

FRANK S. PLATT CO., Post Rd., Branford, Conn.

Platt's Hi-Organic Lawn Fertilizer 10-5-5

PRIDE OF THE VALLEY MILLS, Vernon, N. J.

Fiestar

PROSPECT MANUFACTURING CO., Cranbury, N. J.

Lawn & Garden Food 10-6-4
Lawn Master 5-10-5 Fertilizer
Lawn Master 10-6-4 Hi-Organic Fertilizer
New Garden Crest Lawn & Garden Fertilizer 5-10-5

RA-PID-GRO CORP., 88 Ossian St., Dansville, N. Y.

Ra-Pid-Gro

ST. LOUIS NATIONAL STOCKYARDS CO., Exchange Bldg.,
National Stock Yards, Ill.

Wizard Brand Cow Manure
Wizard Brand Sheep Manure

O. M. SCOTT & SONS CO., Marysville, Ohio

Scott's Dawn
Scott's New Turf Builder
Scott's New Weed & Feed - Bonus

SEABOARD SEED CO., 701 S. Front St., Philadelphia 47, Pa.

Seaboard's Hi-Acid Plant Food 8-14-6
Seaboard's Lawn & Plant Food
Seaboard's Lawn Feeding Weed Killer

SEARS, ROEBUCK & CO., 925 S. Homan Ave., D/671,
Chicago 7, Ill.

Cross Country Azalea Food
Cross Country Bone Meal
Cross Country Bulb Food
Cross Country Cattle Manure
Cross Country Crabgrass Plant Killer with Lawn Food
Cross Country Economy Fertilizer
Cross Country Evergreen Food
Cross Country Instant Plant Food
Cross Country Instant Rose Food
Cross Country Instant Tomato Food
Cross Country Lawn Food
Cross Country Lawn Food w/Weed Killer
Cross Country Lawn Quick Green 10-6-4
Cross Country Liquid Plant Food
Cross Country Merion Bluegrass Lawn Food 20-10-5
Cross Country Organic Cattle Manure Compost
Cross Country Organic Sheep Manure Compost
Cross Country Plant Food
Cross Country Rose Food
Cross Country Sheep Manure
Cross Country Sulfate of Ammonia
Cross Country Superfine Lawn Food

SEWERAGE COMMISSION OF THE CITY OF MILWAUKEE,
P. O. Box 2079, Milwaukee 1, Wis.

Milorganite (50 lb. bag size)
Milorganite
Milorganite Plus 2, 4-D

THE SHERWIN-WILLIAMS CO., 101 Prospect Ave., N.W.,
Cleveland, Ohio

Sherwin-Williams 34% Linseed Oil Meal (Solvent Extr.)

M. L. SHOEMAKER, Div. Wilson & Co., Delaware & Venango
Sts., Philadelphia, Pa.

M. L. Shoemaker's "Swift-Sure"

THE SOUTHERN COTTON OIL CO., Div. Hunt Foods & Industries, Inc., 738 West Union St., Greenville, Miss.

Sco-Co 41% Protein Cottonseed Meal

A. E. STALEY MANUFACTURING CO., Decatur, Ill.

44% Protein Solvent Extracted Soybean Oil Meal

STERN'S NURSERIES, 404 William St., Geneva, N. Y.

Miracle-Gro for Roses

STIM-U-PLANT LABORATORIES, INC., 2077 Parkwood Ave.,
Columbus 19, Ohio

Stim-U-Plant 5-8-7

Stim-U-Plant 11-12-15

SWIFT & CO., Agricultural Chemical Div., Curtis Bay,
Baltimore 26, Md.

Golden Vigoro

Golden Vigoro with End-O-Pest

Instant Vigoro

Par-Ex

Pink Vigoro

Vigoro Bulb Food

Vigoro Evergreen Food

Vigoro for Azaleas & Camellias

Vigoro Lawn Starter

Vigoro Rose Food

Vitogro

Vitogro Lawn Weeder & Feeder

SWISS FARMS, Philmont, N. Y.

Plantdrops Instant Liquid African Violet Food

Plantdrops Instant Liquid Plant Food 6-18-6

Plant Food 6-15-11

Rose Food 6-15-11

L. TEWELES SEED CO., 222 S. 3rd St., Milwaukee, Wis.

Nuturf COMBO
Nuturf TURF-LIFE

TIMBERLAKE INDUSTRIES INC., Warren, Maine

Endressin

TOWN & COUNTRY PRODUCTS, 1072 West Side Ave., Jersey City, N. J.

Green Pride Lawn & Plant Food

UNEXCELLED CHEMICAL CORP., Bennett & Clayton Division, Cranbury, N. J.

B/C Brand Fertilizer 5-10-5
Garden Crest 5-10-5
General Green 20-10-5
Lawn & Garden Food 5-10-5
Lawn & Garden Food B/C Brand 5-10-5
Lawn & Garden Food Hi-Organic 10-6-4
Lawn Life 20-10-5
Lawn Master Fertilizer 10-6-4 100% Organic
Lawn Master Hi Organic 10-6-4
Princeton Park 5-10-5 Lawn & Garden Fertilizer
Princeton Park Lawn & Garden Fertilizer

U. S. PHOSPHORIC PRODUCTS, Div. Tennessee Corp., P. O. Box 3269, Tampa 1, Fla.

Tencor Triple "46" 46% APA Triple Superphosphate

UNITED STATES STEEL CORP., 525 William Penn Pl., Pittsburgh 30, Pa.

USS Ammonium Sulfate

UNIVERSAL CHEMICAL CO. INC., Box 195, West Lynn, Mass.

Electra Plant Food 5-10-3

VALLEY FEED & SUPPLY CO. INC., Union Rd., Spring Valley, N. Y.

Adorna 3-1-1
Adorna Azalea Food 6-10-5
Adorna Tree Food 8-7-7

VITTNER'S GARDEN CENTER, 1 Tolland Turnpike, Manchester, Conn.

Vittner's Weed & Feed

WALKER-GORDON LABORATORY CO., Plainsboro, N. J.

Bovung

OSCAR F. WARNER, 24 East Aurora St., Waterbury, Conn.

Warner Grubedizer
Warner Lawn Food
Warner Tree Food

WHITNEY SEED CO. INC., 599-601 Perry St., Buffalo 5, N. Y.

Whitney's Brand Lawn Fertilizer 20-10-5
Whitney's Vital Brand Fertilizer plus Weed Killer

GARFIELD WILLIAMSON, INC., 1072 West Side Ave., Jersey City, N. J.

Plantspur
Wonderlawn Lawn Food
Wonderlawn 100% Organic Nitrogen

ANDREW WILSON, INC., Baltusrol Way, Springfield, N. J.

Wilson's Eureka Plant Food

WIRTHMORE STORES, INC., Waltham, Mass.

(Registered by Consolidated Rendering, Boston, Mass.)

Organo 10-5-5

S. D. WOODRUFF & SONS OF WETHERSFIELD, INC., 304 Main St., Wethersfield, Conn.

Woodruff's Tuf Turf Turf Food
Woodruff's Tuf Turf Lawn Fertilizer 20-10-5
Woodruff's Tuf Turf Two-For-One

FERTILIZER INSPECTION FOR 1961

The Connecticut fertilizer law does not provide for compulsory limitation of the grades of fertilizer that may be sold in this State, but because all authorities are agreed that a small number of grades can take care of all the needs of agriculture, and that standardization on a few grades will promote economy in manufacture and aid in keeping prices down, the New England agronomists have from time to time compiled lists of recommended fertilizer ratios and minimum grades.

The latest list of ratios, as finally approved at a meeting in Burlington, Vermont on June 19, 1961, and the most common market grades, are as follows:

| <u>Ratio</u> | <u>Common Grade</u> |
|--------------|---------------------|
| 0-1-1 | 0-20-20 |
| 0-1-2 | 0-15-30 |
| 0-1-3 | 0-10-30 |
| 0-1-4 | 0-10-40 |
| 0-3-1 | 0-30-10 |
| 1-1-1 | 10-10-10 |
| 1-2-2 | 5-10-10 |
| 1-4-2 | 3-12- 6 |
| 2-1-1 | 10- 5- 5 |
| 2-1-2 | 6- 3- 6 |
| 2-3-3 | 8-12-12 |
| 3-2-2 | 15-10-10 |
| 3-4-4 | 6- 8- 8 |
| 4-2-3 | 12- 6- 9 |
| 4-3-1 | 8- 6- 2 |

Seventy-one per cent of the mixed fertilizers sold in this State during the 1960-1961 season were of the recommended ratios, in grades whose plant food content equalled or exceeded the "common grades" listed above. Another 14 per cent was concentrated in the two grades 5-10-5 and 10-6-4, of which one was in the previous recommended list.

During the past season the Station agent collected samples of all registered brands that could be found on the market. The total number of official samples analyzed was 474.

The following tabulation lists the number of samples analyzed (both official and unofficial) of each class of fertilizer, as well as the tonnage sold during the period between July 1, 1960 and June 30, 1961:

CLASSIFICATION OF FERTILIZER MATERIALS AND FERTILIZER TONNAGE

(Tonnage is for the period of July 1, 1960 to June 30, 1961)

| | No. of Samples | Tonnage |
|--|-------------------|---------------------|
| I. Containing chiefly nitrogen: | | |
| Nitrate of ammonia | 3 | 555 |
| Nitrate of soda | 6 | 378 |
| Sulphate of ammonia | --- | 23 |
| Cyanamid | 2 | 117 |
| Urea | 11 | 976 |
| Castor pomace | 3 | 812 |
| Cottonseed meal | 43 | 4,854 |
| Dried blood | 1 | 2 |
| Linseed oil meal | 13 | 634 |
| Soybean oil meal | 3 | 100 |
| Other materials | 6 | 496 |
| | | <hr/> 8,947 |
| II. Containing chiefly phosphoric acid: | | |
| Superphosphate 18% | --- | 128 |
| 20% | 12 | 3,901 |
| 46% | 5 | --- |
| Dicalcium phosphate | 2 | --- |
| Precipitated bone | 5 | 268 |
| Phosphate rock | 1 | 44 |
| | | <hr/> 4,341 |
| III. Containing chiefly potash: | | |
| Muriate of potash | 6 | 403 |
| Sulphate of potash | 2 | 139 |
| Sulphate of potash-magnesia | 1 | 60 |
| Cotton hull ashes | 5 | 163 |
| | | <hr/> 765 |
| IV. Containing nitrogen and phosphoric acid: | | |
| Dry ground fish | 10 | 297 |
| Bone meal | 8 | 267 |
| Diammonium phosphate | --- | 9 |
| Other materials | 3 | 755 |
| | | <hr/> 1,328 |
| V. Containing nitrogen and potash: | | |
| Nitrate of potash | 2 | 9 |
| Nitrate of soda-potash | 1 | --- |
| | | <hr/> 9 |
| VI. Mixed fertilizers: | | |
| Commercial mixtures | 315 | 47,289 ¹ |
| Special and home mixtures | 6 | 6,556 |
| | | <hr/> 53,845 |
| VII. Miscellaneous: | | |
| Borax | --- | 21 |
| Sheep and cattle manure | 19 | 872 |
| Limestone and similar materials | 3 | --- |
| Fertilizer sold in small packages | 67 | --- |
| Other miscellaneous materials | 12 | --- |
| Check meals and fertilizers | 21 | --- |
| | | <hr/> 893 |
| Totals | <hr/> 597 | <hr/> 70,128 |

¹ For distribution of this tonnage see next page

MIXED FERTILIZER TONNAGE

Grades Approved for Connecticut

| <u>Grade</u> | <u>Tons</u> | <u>Grade</u> | <u>Tons</u> |
|--------------|-------------|--------------|-------------|
| 0-15-30 | 3,088 | 10-10-10 | 9,829 |
| 0-20-20 | 396 | 10-15-15 | 484 |
| 0-25-25 | 319 | 10-20-20 | 10 |
| 5-10-10 | 6,717 | 12-12-12 | 8 |
| 5-20-10 | 2 | 15-10-10 | 3,133 |
| 6- 3- 6 | 2,036 | 15-15-15 | 512 |
| 6- 8- 8 | 2,301 | 18-18-18 | 3 |
| 6-12-12 | 156 | 20-10- 5 | 9 |
| 8- 6- 2 | 809 | 20-10-10 | 9 |
| 8-12-12 | 489 | 20-20-20 | 7 |
| 8-16-16 | 2,136 | 24-12-12 | 36 |
| 10- 5- 5 | 966 | | |

Total 33,455

Other Grades
(50 tons or more)

| | | | |
|------------|-------|----------|-------|
| 3- 1- 1 | 56 | 6-10-10 | 537 |
| 3- 2- 1 | 60 | 7- 7- 7 | 859 |
| 4-16-20 | 169 | 8- 6- 4 | 917 |
| 4.75- 4- 0 | 62 | 8-10-10 | 916 |
| 5- 4- 0 | 285 | 8-12- 6 | 65 |
| 5- 5- 0 | 55 | 9- 8- 3 | 59 |
| 5- 8- 7 | 611 | 10- 6- 4 | 3,713 |
| 5- 9- 6 | 57 | 12- 5- 7 | 263 |
| 5-10- 5 | 2,674 | 15- 5- 5 | 159 |
| 6- 8- 6 | 105 | 20-10- 5 | 945 |
| 6-10- 4 | 683 | 25-12-10 | 88 |

Total 13,338

(Less than 50 tons)

| | | | |
|---------|----|--------------|----|
| 3-12-12 | 11 | 8- 7- 7 | 9 |
| 4- 6- 4 | 35 | 10- 8- 2 | 12 |
| 4- 8- 4 | 5 | 10-20-10 | 32 |
| 4-10- 0 | 37 | 12- 4- 4 | 8 |
| 4-10- 4 | 9 | 12- 4- 8 | 7 |
| 5- 6-15 | 5 | 12- 6- 4 | 15 |
| 5-10- 3 | 10 | 12-32-12 | 16 |
| 5-15-30 | 9 | 16- 8- 4 | 31 |
| 5-20-20 | 28 | 16-11-13 | 42 |
| 6- 4- 7 | 14 | 16-32-16 | 6 |
| 6- 6- 8 | 14 | 20- 6- 4 | 27 |
| 6- 7- 4 | 36 | 23-21-17 | 15 |
| 6- 8- 2 | 15 | 25-10- 5 | 5 |
| 6-10- 5 | 7 | Other grades | 26 |
| 7-10- 5 | 10 | | |

Total 496

Grand total 47,289

I. Materials Chiefly Valuable for Nitrogen

Analyses of 63 official samples of nitrogenous materials are given in Table 1. Fifty-one of these met their guaranties and 12 were deficient. The substandard samples included 10 cottonseed meals and two miscellaneous products ("Borden 38" and "Organo").

II. Materials Chiefly Valuable for Phosphoric Acid

Ten official samples of 20 per cent superphosphate and four of the 46 per cent grade, together with two samples each of dicalcium phosphate and precipitated bone and one of phosphate rock, all met their guaranties. Analyses are given in Table 2.

III. Materials Chiefly Valuable for Potash

Five official samples of muriate of potash, two of cotton hull ashes, and one each of sulphate of potash and sulphate of potash-magnesia, were analyzed; results are given in Table 3. All samples except one of muriate of potash met their guaranties.

IV. Materials Supplying Nitrogen and Phosphoric Acid

This group consists chiefly of dry ground fish and bone meal. Guaranties of "available" phosphoric acid are not required of such natural products, and most of them guarantee only total nitrogen and total phosphoric acid. Seven official samples each of dry ground fish and bone meal, and three of "Milorganite" (a treated sewage sludge), were analyzed in 1961. No deficiency was found. Analyses are given in Table 4.

V. Materials Supplying Nitrogen and Potash

One official sample each of nitrate of potash and nitrate of soda-potash was analyzed; both samples met all guaranties. Analyses are given in Table 3.

VI. Mixed Fertilizers

Commercial Mixtures

Analyses of 280 official samples of mixed fertilizers are given in Table 5. Results are summarized as follows:

| | | |
|--|----|-----|
| Total number of samples | | 280 |
| Samples deficient in: | | |
| one item | 79 | |
| two items | 10 | |
| three items | 2 | 91 |
| Percentage of samples meeting all guaranties | | 68 |
| Total guaranties made ¹ | | 817 |
| Guaranties not met: | | |
| nitrogen | 59 | |
| phosphoric acid | 22 | |
| potash | 24 | 105 |
| Percentage met | | 87 |

Eighty-seven per cent of all guaranties for major components were substantially met or exceeded.

¹ Two hundred and fifty-eight samples with three guaranties, 21 with two guaranties and one with one guaranty (guaranties of minor elements not included).

Twenty-six samples guaranteed between 0.6 and 1.2 per cent of magnesium (mostly 1.2 per cent) in addition to the major components; all exceeded their guaranties. Four samples declared 0.11 per cent, and one 0.30 per cent, of boron; only one sample was actually below guaranty, but two others contained excessive quantities of this element (over four times the claimed amount in one case). Of three samples that guaranteed 0.15 per cent of iron, only one was reasonably close to guaranty; the other two contained respectively 15 and 21 times the amount claimed.

Special and Home Mixtures

Six samples of special and home mixtures were analyzed during the year, mostly for tobacco growers. Seven years ago there were 150 such samples, but of late years there has been a steady decline - partly because the larger growers made private arrangements for testing their own mixes and partly because less tobacco has been grown.

Since the composition of these six samples is not of public interest their analyses are not tabulated in this bulletin.

State Purchases of Fertilizer

Fertilizer materials and mixed goods supplied to State institutions on State purchase orders are regularly included in our annual inspection. Fertilizers so supplied are not exempt from payment of registration fees and tonnage taxes.

Samples representing State purchases are indicated in the several tables. They are summarized as follows:

| <u>Materials</u> | <u>No. of samples</u> | <u>Reference</u> |
|--|---------------------------|------------------|
| Supplying nitrogen | 7 | Table 1 |
| Supplying phosphoric acid | 4 | Table 2 |
| Supplying potash | 2 | Table 3 |
| Supplying nitrogen and phosphoric acid | 1 | Table 4 |
| Mixed fertilizers | 25 | Table 5 |
| Total | 39 | |

VII. Miscellaneous

Sheep and cattle manures. Manures must bear guaranties of nitrogen, either total or "available" phosphoric acid, and potash. Of the 17 samples analyzed during the 1960-1961 season, 12 met all guaranties, three were deficient only in nitrogen, one was deficient in potash, and one was low in both nitrogen and potash.

Limestone and similar materials. Because the legal definition of "commercial fertilizers" excludes "marl and lime", no regular inspection of liming materials is made. Occasional samples of limestone, hydrated lime and gypsum ("land plaster") are analyzed for farmers. Analyses of three such samples are given in Table 8.

Fertilizers sold in small packages. Fertilizers sold only in packages of 10 pounds or less net weight are not required to be registered. As a service to home gardeners, however, such brands of small package fertilizers as come to the attention of our agent are sampled and analyzed. During the 1960-1961 season 67 such

samples were analyzed. Fifty-one of these, or 76 per cent, met all guaranties, and 89 per cent of the total of 191 guaranties were met - a slightly higher percentage than that found for fertilizers sold in 100 lb. bags. Analyses are given in Table 7.

Other miscellaneous materials. Twelve other miscellaneous products were examined; analyses are given in Table 8.

Check meals and fertilizers. Collaboration was continued with the various check analysis programs: Nine vegetable meal samples received from the American Oil Chemists' Society were analyzed for nitrogen, and the usual determinations were made on 12 check fertilizers supplied by Law and Company of Atlanta, Georgia.

MAINTENANCE OF GUARANTIES

The maintenance of guaranties as compiled from analyses of ingredient materials and mixed goods (Tables 1-7) is shown in the following tabulation. Deficiencies of 0.1 per cent or less in nitrogen, 0.2 per cent or less in phosphoric acid or potash, and 20 per cent of the claimed value in the case of minor elements, are not counted. The proportion of guaranties substantially met was 88 per cent.

| | <u>No. of samples</u> | <u>No. of guaranties</u> | <u>Deficiencies</u> |
|-------------------------------------|---------------------------|------------------------------|---------------------|
| Nitrate of ammonia | 3 | 3 | 0 |
| Nitrate of soda | 4 | 8 | 0 |
| Cyanamid | 2 | 2 | 0 |
| Urea | 9 | 9 | 0 |
| Castor pomace | 2 | 2 | 0 |
| Cottonseed meal | 29 | 29 | 10 |
| Linseed oil meal | 5 | 5 | 0 |
| Soybean oil meal | 2 | 2 | 0 |
| Miscellaneous nitrogenous materials | 7 | 7 | 2 |
| Superphosphate | 14 | 14 | 0 |
| Precipitated bone | 2 | 2 | 0 |
| Dicalcium phosphate | 2 | 4 | 0 |
| Phosphate rock | 1 | 1 | 0 |
| Muriate of potash | 5 | 5 | 1 |
| Nitrate of potash | 1 | 2 | 0 |
| Nitrate of soda-potash | 1 | 3 | 0 |
| Sulphate of potash | 1 | 1 | 0 |
| Sulphate of potash-magnesia | 1 | 2 | 0 |
| Cotton hull ashes | 2 | 2 | 0 |
| Dry ground fish | 7 | 13 | 0 |
| Bone meal | 7 | 14 | 0 |
| "Milorganite" | 3 | 6 | 0 |
| Mixed fertilizer | 280 | 817 | 105 |
| Sheep and cattle manure | 17 | 51 | 6 |
| Small package fertilizers | 67 | 191 | 21 |
| Totals | 474 | 1,195 | 145 |
| Per cent guaranties met | | | 88 |

TABLE 1.

ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

| Station No. | Manufacturer or jobber and dealer | Per cent nitrogen | |
|----------------|--|----------------------|-------|
| | | F | G |
| | NITRATE OF AMMONIA | | |
| 3766 | AEROPRILLS. American Cyanamid Co., New York, N. Y. State purchase, SouthburyTrain- ing School, Southbury. | 33.68 | 33.50 |
| 3791 | AEROPRILLS. American Cyanamid Co., New York, N. Y. State purchase, CheshireReform- atory, Cheshire. | 33.72 | 33.50 |
| 4034 | AEROPRILLS. American Cyanamid Co., New York, N. Y. Sampled at Eastern States Farm- ers' Exchange, Inc., Bethel. | 34.08 | 33.50 |
| | NITRATE OF SODA | | |
| 3982 | Arcadian, Allied Chemical Corp., Nitrogen Div., Hopewell, Va., Sampled at Eastern States Farmers Exchange, Inc., North Haven. Sodium found, 26.50%. | 16.12 | 16.00 |
| 3722 | Chilean, Chilean Nitrate Sales Corp, New York, N. Y., State purchase, University of Conn., Storrs. Sodium found, 26.20%. | 16.20 | 16.00 |
| 3767 | Chilean, Champion. Chilean Nitrate Sales Corp., New York, N. Y. State purchase, Southbury Training School, Southbury. Sodium found, 26.11%. | 16.04 | 16.00 |
| 3992 | Chilean, Champion. Chilean Nitrate Sales Corp., New York, N. Y. Sampled at Eastern States Farmers' Exchange, Inc., North Haven. Sodium found, 26.29%. | 16.10 | 16.00 |
| | CYANAMID | | |
| 3792 | AERO. American Cyanamid Co., New York, N. Y. State purchase, Conn. Reformatory, Cheshire. | 21.08 | 21.00 |
| 4159 | AERO. American Cyanamid Co., New York, N. Y. Sampled at Libner Grain Co. Inc., Norwalk. | 21.00 | 21.00 |

TABLE 1.

ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

| Station No. | Manufacturer or jobber and dealer | Per cent nitrogen | |
|----------------|---|----------------------|-------|
| | | F | G |
| | UREA | | |
| 4539 | Arcadian, Golden. Allied Chemical Corp., Hopewell, Va. Sampled at Walter W. Simmons & Son, Inc., Granby. | 30.02 | 30.00 |
| 3717 | AERO. American Cyanamid Co., New York, N. Y. Sampled at Eastern States Farmers' Exchange, Inc., Willimantic. | 45.52 | 45.00 |
| 3313 | Cobelaz. Carbochimique, Belgium. Sampled at A. S. T. Corp., Bloomfield. | 46.36 | 46.00 |
| 4532 | Cobelaz. Carbochimique, Belgium. State purchase, Conn. State Highway Dept., Portland. | 46.56 | 46.00 |
| 4033 | duPONT Nu Green. E. I. duPont de Nemours & Co., Wilmington, Del. State purchase, Fairfield State Hospital, Newtown. | 45.68 | 45.00 |
| 4353 | duPONT Nu Green. E. I. duPont de Nemours & Co., Wilmington, Del. Sampled at New Haven Rendering Co., West Haven. | 45.88 | 45.00 |
| 3943 | duPONT URAMITE. E. I. duPont de Nemours & Co. Inc., Wilmington, Del. Sampled at Cadwell & Jones, Inc., Hartford. | 38.48 | 38.00 |
| 3273 | duPONT URAMITE M. E. I. duPont de Nemours & Co., Wilmington, Del. Sampled at The Hartman Tobacco Co., Bloomfield. | 38.07 | 38.00 |
| 3704 | Mathieson. Olin Mathieson Chemical Corp., Little Rock, Ark. Sampled at Old Fox Agri- cultural Sales, Inc., Hazardville. | 45.76 | 45.00 |

TABLE 1.

ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

| ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN | | | |
|--|---|----------------------|------|
| Station No. | Manufacturer or jobber and dealer | Per cent nitrogen | |
| | | F | G |
| | CASTOR POMACE | | |
| 3311 | Baker Castor Oil Co., Bayonne, N. J. Sam- pled at American Sumatra Tobacco Corp., Bloomfield. | 5.58 | 5.00 |
| 3632 | Baker Castor Oil Co., Bayonne, N. J. Sampled at Comstock Ferre & Co., Wethersfield. | 6.14 | 5.00 |
| | COTTONSEED MEAL | | |
| 4318 | Owl 41%. The Brode Corp., Memphis, Tenn. Sampled at H. L. Oppenheimer & Sons, West Suffield. | 6.56 | 6.56 |
| 3248 | Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at Cullman Bros. Inc. Farm No. 1, Simsbury. | 6.64 | 6.56 |
| 3250 | Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at Cullman Bros. Inc. Farm No. 1, Simsbury. | 6.56 | 6.56 |
| 3257 | Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at Hatheway & Steane Corp., West Suffield. | 6.38 ~~~~~ | 6.56 |
| 3258 | Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at Hatheway & Steane Corp., West Suffield. | 6.62 | 6.56 |
| 3263 | Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at Hatheway & Steane Corp., West Suffield. | 6.56 | 6.56 |
| 3312 | Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at A. S. T. Corp., Bloomfield. | 6.76 | 6.56 |
| 3654 | Consolidated Rendering Co., Boston, Mass. Sampled at Comstock Ferre & Co., Wethers- field. | 6.62 | 6.00 |

~~~~~ indicates deficiencies.



TABLE 1.

## ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

| Station<br>No. | Manufacturer or jobber and dealer                                                                                 | Per cent<br>nitrogen |      |
|----------------|-------------------------------------------------------------------------------------------------------------------|----------------------|------|
|                |                                                                                                                   | F                    | G    |
| 3598           | Solvent Extracted 41%. John W. Eshelman & Sons, Lancaster, Pa. Sampled at Belmont Feed Co., Cos-Cob.              | <u>6.12</u>          | 6.56 |
| 4163           | F & B. Faesy & Besthoff, Inc., New York, N. Y. Sampled at Silliman's Inc., New Canaan.                            | 6.68                 | 6.00 |
| 3249           | Golden Rod 41%. Goldenrod Oil Meal Sales Co., Memphis, Tenn. Sampled at Cullman Bros. Inc., Farm No. 1, Simsbury. | 6.58                 | 6.56 |
| 3930           | G & O. Goulard & Olena Inc., Skillman, N. J. Sampled at Cadwell & Jones, Inc., Hartford.                          | 6.56                 | 6.56 |
| 3256           | Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at Hatheway & Steane Corp., West Suffield.          | <u>6.22</u>          | 6.56 |
| 3269           | Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at The Hartman Tobacco Co., Bloomfield.             | 6.56                 | 6.56 |
| 3270           | Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at The Hartman Tobacco Co., Bloomfield.             | 6.94                 | 6.56 |
| 3271           | Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at The Hartman Tobacco Co., Bloomfield.             | <u>6.36</u>          | 6.56 |
| 3318           | Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at L. B. Haas & Co., Hazardville.                   | <u>6.20</u>          | 6.56 |
| 3320           | Dixie Brand 41%. Humphreys-Godwin Co., Memphis, Tenn. Sampled at L. B. Haas & Co., Hazardville.                   | <u>6.32</u>          | 6.56 |
| 3268           | Lovit Brand 41%. L. B. Lovitt & Co., Memphis, Tenn. Sampled at The Hartman Tobacco Co., Bloomfield.               | 6.92                 | 6.56 |

         indicates deficiencies.

TABLE 1.

## ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

| Station No. | Manufacturer or jobber and dealer                                                                                        | Per cent nitrogen |      |
|-------------|--------------------------------------------------------------------------------------------------------------------------|-------------------|------|
|             |                                                                                                                          | F                 | G    |
| 3274        | Lovit Brand 41%. L.B.Lovitt & Co., Memphis, Tenn. Sampled at The Hartman Tobacco Co., Bloomfield.                        | 6.66              | 6.56 |
| 3310        | Lovit Brand 41%. L.B.Lovitt & Co., Memphis, Tenn. Sampled at The Hartman Tobacco Co., Bloomfield.                        | 6.70              | 6.56 |
| 3319        | Lovit Brand 41%. L.B.Lovitt & Co., Memphis, Tenn. Sampled at L.B.Haas & Co., Hazardville.                                | <u>6.06</u>       | 6.56 |
| 3317        | Lovit Brand 41%. L.B.Lovitt & Co., Memphis, Tenn. Sampled at L.B.Haas & Co., Hazardville.                                | 6.56              | 6.56 |
| 3255        | 41%. Mississippi Oil Mills, Inc., Greenville Plant, Greenville, Miss. Sampled at Hatheway-Steane Corp., West Suffield.   | <u>6.32</u>       | 6.56 |
| 3264        | 41%. Mississippi Oil Mills, Inc., Greenville Plant, Greenville, Miss. Sampled at Hatheway & Steane Corp., West Suffield. | 6.56              | 6.56 |
| 3265        | 41%. Mississippi Oil Mills, Inc., Greenville Plant, Greenville, Miss. Sampled at Hatheway & Steane Corp., West Suffield. | 6.56              | 6.56 |
| 3314        | Expello 41%. Riverside Oil Mill, Marks, Miss. Sampled at A.S.T. Corp., Bloomfield.                                       | <u>6.02</u>       | 6.56 |
| 3315        | Expello 41%. Riverside Oil Mill, Marks, Miss. Sampled at A.S.T. Corp., Bloomfield.                                       | <u>6.28</u>       | 6.56 |
| 3316        | Expello 41%. Riverside Oil Mill, Marks, Miss. Sampled at A.S.T. Corp., Bloomfield.                                       | 6.72              | 6.56 |

         indicates deficiencies.

TABLE 1.

## ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

| Station<br>No.   | Manufacturer or jobber and dealer                                                                                       | Per cent<br>nitrogen |      |
|------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------|------|
|                  |                                                                                                                         | F                    | G    |
| LINSEED OIL MEAL |                                                                                                                         |                      |      |
| 3254             | Spencer Kellogg 32%. Spencer Kellogg & Sons Inc., Minneapolis, Minn. Sampled at Hatheway & Steane Corp., West Suffield. | 5.88                 | 5.12 |
| 3247             | Sherwin-Williams 34%. Sherwin-Williams Co., Cleveland, Ohio. Sampled at Cullman Bros. Inc., Farm No. 1, Simsbury.       | 5.66                 | 5.44 |
| 3253             | Sherwin-Williams 34%. Sherwin-Williams Co., Cleveland, Ohio. Sampled at Cullman Bros. Inc., Farm No. 3, Granby.         | 5.55                 | 5.44 |
| 3272             | Sherwin-Williams 34%. Sherwin-Williams Co., Cleveland, Ohio. Sampled at The Hartman Tobacco Co., Bloomfield.            | 5.62                 | 5.44 |
| 3309             | Sherwin-Williams 34%. Sherwin-Williams Co., Cleveland, Ohio. Sampled at The Hartman Tobacco Co., Bloomfield.            | 5.70                 | 5.44 |
| SOYBEAN OIL MEAL |                                                                                                                         |                      |      |
| 3251             | Staley's 44%. Staley Mfg. Co., Decatur, Ill. Sampled at Cullman Bros. Inc., Farm No. 1, Simsbury.                       | 7.38                 | 7.04 |
| 3252             | Staley's 44%. A.E. Staley Mfg. Co., Decatur, Ill. Sampled at Cullman Bros. Inc. Farm No. 3, Granby.                     | 7.22                 | 7.04 |
| MISCELLANEOUS    |                                                                                                                         |                      |      |
| 3903             | Agrinite. The American Agricultural Chemical Co., New York, N.Y. Sampled at Plantland on the Parkway, Buckland.         | 7.58                 | 7.00 |
| 4358             | Purge. Asgrow Seed Co., New Haven, Conn. Sampled at Asgrow Seed Co., Milford.                                           | 4.32                 | 4.00 |

TABLE 1.

## ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

| Station<br>No. | Manufacturer or jobber and dealer                                                                                         | Per cent<br>nitrogen |       |
|----------------|---------------------------------------------------------------------------------------------------------------------------|----------------------|-------|
|                |                                                                                                                           | F                    | G     |
| 3589           | Borden "38". The Borden Co., Chemical Div., New York, N. Y. Sampled at Mc Ardle's Seed Co., Greenwich.                    | <u>37.76</u>         | 38.00 |
| 4162           | Dried Blood. Brookside Nurseries, Inc., Darien, Conn. Sampled at Brookside Nurseries Inc., Darien.                        | 12.50                | 12.50 |
| 4545           | Lawn Weed Killer. The Garden Center, Inc., West Hartford, Conn. Sampled at The Garden Center Inc., West Hartford.         | 25.52                | 25.00 |
| 4387           | Organo. Old Fox Agricultural Sales Inc., East Providence, R. I. Sampled at Old Fox Agricultural Sales, Inc., Hazardville. | <u>4.76</u>          | 5.00  |
| 3509           | Bonus Weed & Feed. O. M. Scott & Sons Co. Marysville, Ohio. Sampled at Bacon Bros., Inc., Middletown.                     | 26.52                | 25.00 |

 indicates deficiencies.

TABLE 2. ANALYSES OF SUPERPHOSPHATE, ETC.

| Station No.    | Manufacturer or jobber and dealer                                                                                      | Per cent phosphoric acid |       |             |       |
|----------------|------------------------------------------------------------------------------------------------------------------------|--------------------------|-------|-------------|-------|
|                |                                                                                                                        | Citrate insoluble        | Total | "Available" |       |
|                |                                                                                                                        |                          |       | F           | G     |
| SUPERPHOSPHATE |                                                                                                                        |                          |       |             |       |
| 3590           | Agri-Phos. American Agricultural Chemical Co., New York, N. Y.<br>Sampled at McArdle's Seed Co., Greenwich.            | 0.45                     | 21.45 | 21.00       | 20.00 |
| 3698           | Agri-Phos. American Agricultural Chemical Co., New York, N. Y.<br>State purchase, Osborn Prison Farm, Enfield.         | 0.17                     | 20.80 | 20.63       | 20.00 |
| 4411           | Agri-Phos. American Agricultural Chemical Co., New York, N. Y.<br>State purchase, Conn. State Farm for Women, Niantic. | 0.15                     | 20.70 | 20.55       | 20.00 |
| 3397           | Trebo-Phos. American Cyanamid Co., New York, N. Y. Sampled<br>at Cullman Bros. Inc., Farm No. 1, Simsbury.             | 0.00                     | 46.30 | 46.30       | 46.00 |
| 3484           | Trebo-Phos. American Cyanamid Co., New York, N. Y. Sampled<br>at The Hartman Tobacco Co., Bloomfield.                  | 0.20                     | 48.30 | 48.10       | 46.00 |
| 4533           | Trebo-Phos. American Cyanamid Co., New York, N. Y. State<br>purchase, Conn. State Highway Dept., Portland.             | 1.05                     | 48.40 | 47.35       | 46.00 |
| 3900           | 20%. Consolidated Rendering Co., Boston, Mass. Sampled at The<br>A. E. Shedd Co., Inc., Norwich.                       | 0.33                     | 21.00 | 20.67       | 20.00 |



|                             |                                                                                                                         |      |       |       |       |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------|------|-------|-------|-------|
| 3765                        | 20%. Consolidated Rendering Co., Boston, Mass. State purchase, Southbury Training School, Southbury.                    | 0.90 | 22.45 | 21.55 | 20.00 |
| 3401                        | 20%. Eastern States Farmers Exchange, Inc., W. Springfield, Mass. Sampled at Walter W. Simmons & Son, Inc., Granby.     | 0.60 | 21.35 | 20.75 | 20.00 |
| 3708                        | 20%. Davison Chemical Co., Baltimore, Md. Sampled at Checker-board Feed Store, Willimantic.                             | 1.05 | 22.40 | 21.35 | 20.00 |
| 3486                        | 20%. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at A.S.T. Corp., Bloomfield.                               | 1.00 | 21.20 | 20.20 | 20.00 |
| 4009                        | 20%. Old Fox Agricultural Sales, Inc., E. Providence, R.I. Sampled at Old Fox Agricultural Sales, Inc., Hazardville.    | 0.20 | 21.20 | 21.00 | 20.00 |
| 3974                        | 20%. Olin Mathieson Chemical Corp., Baltimore, Md. Sampled at Gardener's Center, Inc., Darien.                          | 1.05 | 23.20 | 22.15 | 20.00 |
| 3996                        | 46%. U.S. Phosphoric Products Div. Tenn. Corp., Tampa, Fla. Sampled at Eastern States Farmers' Exchange Inc., Buckland. | 1.30 | 47.60 | 46.30 | 46.00 |
| PRECIPITATED BONE PHOSPHATE |                                                                                                                         |      |       |       |       |
| 3395                        | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Cullman Bros. Inc., Farm No. 1, Simsbury.                    | 0.05 | 46.50 | 46.45 | 42.00 |
| 3398                        | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Cullman Bros. Inc., Farm No. 3, Granby.                      | 1.80 | 45.40 | 43.60 | 42.00 |

TABLE 2. ANALYSES OF SUPERPHOSPHATE, ETC.

| Station No.       | Manufacturer or jobber and dealer                                                                                         | Per cent phosphoric acid |                    |             |       |
|-------------------|---------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------|-------------|-------|
|                   |                                                                                                                           | Citrate insoluble        | Total              | "Available" |       |
|                   |                                                                                                                           |                          |                    | F           | G     |
| 3403 <sup>1</sup> | DI CALCIUM PHOSPHATE<br>Eastman Gelatine Corp., Peabody, Mass. Sampled at Hatheway & Steane Corp., West Suffield.         | 0.15                     | 46.50              | 46.35       | 42.40 |
| 3487 <sup>2</sup> | Eastman Gelatine Corp., Peabody, Mass. Sampled at A.S.T. Corp., Bloomfield.                                               | 0.07                     | 44.50              | 44.43       | 42.40 |
| 3771              | PHOSPHATE ROCK<br>The American Agricultural Chemical Co., No. Weymouth, Mass. Sampled at H. S. Coe & Co. Inc., Waterbury. | 26.48                    | 31.40 <sup>3</sup> | 4.92        | 3.00  |

<sup>1</sup> Calcium: Found, 25.33%; Guaranteed, 25.00%.<sup>2</sup> Calcium: Found, 25.52%; Guaranteed, 25.00%.<sup>3</sup> Guaranteed, 31.0%.

TABLE 3. ANALYSES OF POTASH SALTS, ETC.

| Station<br>No.    | Manufacturer or jobber and dealer                                                                                           | Per cent<br>potash |       |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------|-------|
|                   |                                                                                                                             | F                  | G     |
|                   | MURIATE OF POTASH                                                                                                           |                    |       |
| 3697              | Consolidated Rendering Co., Boston, Mass.<br>State purchase, Osborn Prison Farm,<br>Enfield.                                | <u>58.04</u>       | 60.00 |
| 3485              | The Hubbard-Hall Chemical Co., Waterbury,<br>Conn. Sampled at A. S. T. Corp., Bloomfield.                                   | 60.64              | 60.00 |
| 3993              | International Minerals Chemical Corp.,<br>Skokie, Ill. Sampled at Eastern States Far.<br>Exchange Inc., North Haven.        | 60.24              | 60.00 |
| 4535              | International Minerals & Chemical Corp.,<br>Skokie, Ill. State purchase, Conn. State<br>Highway Dept., Portland.            | 60.04              | 60.00 |
| 3706              | Old Fox Agricultural Sales Inc., East Pro-<br>vidence, R. I. Sampled at Old Fox Agricul-<br>tural Sales, Inc., Hazardville. | 60.40              | 60.00 |
|                   | NITRATE OF POTASH                                                                                                           |                    |       |
| 3481 <sup>1</sup> | The Hubbard-Hall Chemical Co., Waterbury,<br>Conn. Sampled at Hatheway & Steane Corp.,<br>West Suffield.                    | 45.60              | 44.00 |
|                   | NITRATE OF SODA-POTASH                                                                                                      |                    |       |
| 4257 <sup>2</sup> | Chilean Nitrate Sales Corp., New York, N. Y.<br>Sampled at The Hubbard-Hall Chemical Co.,<br>Windsorville.                  | 14.50              | 14.00 |
|                   | SULPHATE OF POTASH                                                                                                          |                    |       |
| 3477              | The Hubbard-Hall Chemical Co., Waterbury,<br>Conn. Sampled at Cullman Bros. Inc.,<br>Farm No. 1, Simsbury.                  | 49.20              | 48.00 |
|                   | SULPHATE OF POTASH AND MAGNESIA                                                                                             |                    |       |
| 3482 <sup>3</sup> | International Minerals & Chemical Corp.,<br>Skokie, Ill. Sampled at The Hartman To-<br>bacco Co., Bloomfield.               | 22.06              | 21.00 |

~~~~~ indicates deficiencies.

TABLE 3. ANALYSES OF POTASH SALTS, ETC.

| Station No. | Manufacturer or jobber and dealer | Per cent potash | |
|----------------|---|--------------------|---------------|
| | | F | G |
| | COTTON HULL ASHES | | |
| 3480 | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway & Steane Corp, West Suffield. | 33.18 | unit basis |
| 3483 | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hartman Tobacco Co., Bloomfield. | 35.86 | unit basis |

¹ Nitrogen: Guaranteed, 11.0%; found, 13.36%.

² Nitrogen: Guaranteed, 15.0%; found, 15.0%. Sodium:
Guaranteed, 18.0%; found, 18.05%.

³ Magnesium: Guaranteed, 11.0%; found, 11.35%.

TABLE 4. ANALYSES OF GROUND FISH, BONE, ETC.

| Station No. | Manufacturer or jobber and dealer | Per cent nitrogen | | Per cent phosphoric acid | | Mechanical analysis (per cent) | |
|-----------------|--|-------------------|------------------|--------------------------|------------------|--------------------------------|------------------------|
| | | Total found | Total guaranteed | Total found | Total guaranteed | Finer than 1/50 inch | Coarser than 1/50 inch |
| DRY GROUND FISH | | | | | | | |
| 3402 | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway & Steane Corp., West Suffield. | 10.60 | 9.50 | 6.39 | 5.00 | | |
| 3404 | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway & Steane Corp., West Suffield. | 10.54 | 9.50 | 6.25 | 5.00 | | |
| 3405 | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway & Steane Corp., West Suffield. | 10.56 | 9.50 | 6.45 | 5.00 | | |
| 3406 | The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hartman Tobacco Co., Bloomfield. | 10.64 | 9.50 | 6.67 | 5.00 | | |
| 3396 | Wilbur-Ellis Co., New York, N.Y. Sampled at Cullman Bros. Inc., Farm No. 1, Simsbury. | 10.58 | 9.60 | 6.20 | 5.00 | | |
| 3399 | Wilbur-Ellis Co., New York, N.Y. Sampled at Cullman Bros. Inc., Farm No. 3, Granby. | 10.44 | 9.60 | 6.45 | 5.00 | | |
| 3478 | Wilbur-Ellis Co., New York, N.Y. Sampled at Cullman Bros. Inc., Farm No. 1, Simsbury. | 10.58 | 9.60 | 6.30 | | | |

| BONE MEAL | | | | | | |
|-------------|---|------|------|--------------------|-------|-----------|
| 3713 | Consolidated Rendering Co., Boston, Mass. Sampled at Checkerboard Feed Store, Willimantic. | 2.22 | 2.00 | 25.48 | 22.00 | 60.0 40.0 |
| 4039 | Consolidated Rendering Co., Boston, Mass. State purchase, Danbury Teachers College, Danbury. | 2.00 | 2.00 | 28.60 ¹ | 22.00 | 63.0 37.0 |
| 3588 | Faesy & Besthoff, Inc., New York, N.Y. Sampled at McArdles Seed Co., Greenwich. | 2.54 | 2.47 | 27.15 | 23.00 | 57.0 43.0 |
| 3973 | Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Gardener's Center Inc., Darien. | 2.74 | 2.00 | 24.85 | 23.00 | 60.0 40.0 |
| 3950 | Lebanon Chemical Corp., Lebanon, Pa. Sampled at Leon Ezzell, Inc., Stamford. | 2.60 | 2.30 | 29.00 ² | 20.00 | 62.0 38.0 |
| 4158 | Libner Grain Co. Inc., Norwalk, Conn. Sampled at Libner Grain Co. Inc., Norwalk. | 2.58 | 2.47 | 26.90 | 23.00 | 67.0 33.0 |
| 4550 | Sears, Roebuck & Co., Chicago, Ill. Sampled at Sears, Roebuck & Co., Hamden. | 2.80 | 2.00 | 25.85 ³ | 23.00 | 62.0 38.0 |
| MILORGANITE | | | | | | |
| 3829 | The Sewerage Commission, Milwaukee, Wisc. Sampled at Derby Feed Store, Derby. | 5.86 | 5.50 | 3.95 ⁴ | | |
| 4165 | Sewerage Commission of the City of Milwaukee, Milwaukee, Wisc. Sampled at Clapboard Hill Feed Co., New Canaan. | 5.76 | 5.50 | 4.50 ⁵ | | |
| 3810 | Sewerage Commission of the City of Milwaukee, Milwaukee, Wisc. Sampled at Birchville Garden Center, Plainville. | 5.58 | 5.00 | 4.50 ⁶ | | |

¹ "Available" phosphoric acid: G., 15.00; F., 17.40 ⁴ "Available" phosphoric acid: G., 3.00; F., 3.02

² "Available" phosphoric acid: G., 15.00; F., 19.50 ⁵ "Available" phosphoric acid: G., 4.00; F., 3.95

³ "Available" phosphoric acid: G., 14.00; F., 17.55 ⁶ "Available" phosphoric acid: G., 4.00; F., 3.95

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|---------------------|--|-------------------|
| | <u>A-PENN OIL CO.</u> Butler, Pa. | |
| 4037 | Marvel Green Lawn Builder Complete Lawn Food 20-10-5 | Danbury |
| | <u>AGRICULTURAL PRODUCTS CO.</u> W. Kingston, R.I. | |
| 4328 | APCO Organic Lawn Food | New Britain |
| 3580 | Blue Ribbon 5-10-5 Fertilizer Lawn- Garden | Branford |
| 3579 | Golden Comet 8-6-4 Lawn Food | Branford |
| 3723 | Guardian Gro-Green Lawn Fertilizer 8-6-4 | Willimantic |
| 3661 | Super Turf King 8-6-4 Lawn Food | Milford |
| 3662 | Turf King Lawn & Garden Fertilizer 6-10-4 | Milford |
| | <u>AGRICULTURAL SUPPLY CO.</u> West Haven, Conn | |
| 3575 | Yale Special Mixture 8-6-2 | Hamden |
| | <u>THE AMERICAN AGRICULTURAL CHEMICAL CO. N.</u> Weymouth, Mass. | |
| 3772 | A-A Plant Food 5-10-5 | Waterbury |
| 3597 | A-A Quality Fertilizer 5-10-10 | Cos-Cob |
| 3720 ^{1,2} | A-A Quality Fertilizer 5-10-10-1.2 Magnesium | Storrs |
| 3899 ^{1,3} | A-A Quality Fertilizer 5-10-10-1.2 Magnesium | Norwich |
| 4409 ^{1,4} | A-A Quality Fertilizer 5-10-10-1.2 Magnesium | Niantic |
| 3718 ¹ | A-A Quality Fertilizer 7-7-7 | Storrs |
| 4007 | A-A Quality Fertilizer 8-16-16 | Rockville |
| 4538 | A-A Quality Fertilizer 10-6-4 | Windsor Locks |
| 3696 ¹ | A-A Quality Fertilizer 10-10-10 | Enfield |
| 3801 | A-A Quality Fertilizer 10-10-10 | Southington |
| 3976 | Agrico ACR Fertilizer 6-10-4 | Darien |
| 4004 | Agrico Country Club Fertilizer 12-4-8 | Rockville |
| 4003 | Agrico for Aroostook 10-15-15 | Rockville |

~~~~~ indicates deficiencies.

<sup>1</sup> State purchase.<sup>2</sup> Magnesium: Guaranteed, 1.2%; found, 1.99%.

## CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen,<br>per cent |            |                   |                     |             | Phosphoric acid,<br>per cent |       |                          | Potash,<br>per cent |       |
|-----------------------|------------|-------------------|---------------------|-------------|------------------------------|-------|--------------------------|---------------------|-------|
| Nitrate               | Ammoniacal | Water-<br>soluble | Water-<br>insoluble | Total       | Citrate-<br>insoluble        | Total | So-called<br>"available" | As muriate          | Total |
| 0.40                  | 6.52       | 11.68             | 2.24                | 20.84       | 0.38                         | 10.70 | 10.32                    | 0.19                | 5.19  |
| 0.18                  | 0.00       | 0.24              | 5.14                | 5.56        | 1.20                         | 6.05  | 4.85                     |                     |       |
| 0.14                  | 5.44       | 0.04              | 0.32                | 5.94        | 0.12                         | 9.70  | 9.58                     | 4.04                | 5.10  |
|                       | 5.52       | 1.78              | 0.70                | 8.00        | 0.15                         | 7.27  | <u>7.12</u>              | 2.90                | 4.18  |
| 0.96                  | 6.48       | 0.88              | 0.00                | 8.32        | 0.30                         | 6.80  | 6.50                     | 3.16                | 4.21  |
| 0.10                  | 5.64       | 1.56              | 1.14                | 8.44        | 0.25                         | 6.77  | 6.52                     | 2.34                | 4.02  |
| 0.28                  | 5.96       | 0.20              | 0.10                | 6.54        | 0.05                         | 10.97 | 10.92                    | 2.84                | 4.30  |
| 0.36                  | 4.96       | 2.76              | 0.42                | 8.50        | 0.20                         | 7.20  | 7.00                     | 1.30                | 2.40  |
| 0.20                  | 4.36       | 0.12              | 0.10                | 4.72        | 0.40                         | 10.75 | 10.35                    | 1.46                | 5.38  |
| 1.38                  | 3.80       | 0.20              | 0.16                | <u>5.54</u> | 0.30                         | 10.30 | 10.00                    | 7.17                | 10.04 |
| 0.00                  | 5.04       | 0.30              | 0.00                | 5.34        | 0.45                         | 10.87 | 10.42                    | 7.91                | 10.01 |
| 0.00                  | 4.96       | 0.12              | 0.10                | 5.18        | 0.40                         | 11.10 | 10.70                    | 7.87                | 10.15 |
| 0.00                  | 4.96       | 0.12              | 0.20                | 5.28        | 0.45                         | 10.77 | 10.32                    | 7.80                | 10.12 |
| 1.64                  | 5.48       | 0.08              | 0.00                | 7.20        | 0.35                         | 7.72  | 7.37                     | 4.67                | 7.16  |
| 1.80                  | 5.60       | 0.56              | 0.10                | 8.06        | 0.50                         | 20.06 | 19.56                    | 13.32               | 16.08 |
| 0.72                  | 7.76       | 0.40              | 0.30                | <u>9.18</u> | 0.30                         | 7.35  | 7.05                     | 2.38                | 4.36  |
| 1.85                  | 7.28       | 0.52              | 0.35                | 10.00       | 0.15                         | 10.85 | 10.70                    | 8.61                | 10.22 |
| 2.14                  | 7.72       | 0.12              | 0.10                | 10.08       | 0.30                         | 10.57 | 10.27                    | 6.41                | 10.37 |
| 0.00                  | 5.16       | 0.48              | 0.36                | 6.00        | 0.57                         | 10.30 | <u>9.73</u>              | 0.46                | 4.57  |
| 0.00                  | 5.64       | 5.88              | 0.62                | 12.14       | 0.40                         | 4.70  | 4.30                     | 6.35                | 8.05  |
| 1.67                  | 7.44       | 0.24              | 0.11                | <u>9.46</u> | 0.30                         | 15.35 | 15.05                    | 11.62               | 15.11 |

<sup>3</sup> Magnesium: Guaranteed, 1.20%; found, 2.05%.<sup>4</sup> Magnesium: Guaranteed, 1.20%; found, 1.45%.



TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No.       | Manufacturer and brand                                                 | Place of sampling |
|-------------------|------------------------------------------------------------------------|-------------------|
| 3954              | Agrico for Gardens 5-10-5                                              | Stamford          |
| 3592              | Agrico for Lawns, Trees & Shrubs<br>6-10-4                             | Greenwich         |
| 3795              | Agrico for New England 5-8-7                                           | Southington       |
| 3802 <sup>5</sup> | Agrico for Potatoes 5-10-10-1.2<br>Magnesium                           | Southington       |
| 3587              | Agrico for Turf Grass Food 10-6-4                                      | Greenwich         |
| 3800              | Agrico for Turf with Urea-Form 10-6-4                                  | Southington       |
| 3953              | Agrico Insect Control with Fertilizer<br>5-9-6                         | Stamford          |
| 3674              | Agrico Rose Food 5-9-6                                                 | Bridgeport        |
| 4005              | Agrico Seeding Down 5-20-20                                            | Rockville         |
| 4006              | Agrico Top Dressing 15-10-10                                           | Rockville         |
| 3596              | Agrico Weed Control with Fertilizer<br>5-9-6                           | Cos-Cob           |
| 3831              | Homestead Complete Grass Fertilizer<br>10-6-4                          | Bridgeport        |
| 3832              | Homestead Farm Style Multi-Purpose<br>Fertilizer 5-10-5                | Bridgeport        |
|                   | <u>ARMOUR AGRICULTURAL CHEM-<br/>ICAL CO. Carteret, N.J.</u>           |                   |
| 3807              | Armour Armorganic Plant Food 5-5-0                                     | Plantsville       |
| 3804              | Armour Big Crop Fertilizer 5-8-7                                       | Plantsville       |
| 4202              | Armour Big Crop Fertilizer 5-10-5                                      | Vernon            |
| 3806              | Armour Big Crop Fertilizer 5-10-10                                     | Plantsville       |
| 4203              | Armour Home & Garden Special<br>5-10-5                                 | Vernon            |
| 4200              | Armour Lawn Special 10-6-4                                             | Vernon            |
| 4184              | Armour Vertagreen Complete Plant<br>Food for Commercial Crops 6-8-8    | Vernon            |
| 4198              | Armour Vertagreen Complete Plant<br>Food for Commercial Crops 6-12-12  | Vernon            |
| 4187              | Armour Vertagreen Complete Plant<br>Food for Commercial Crops 10-10-10 | Vernon            |
| 4189              | Armour Vertagreen for Acid Loving<br>Plants 5-10-10                    | Vernon            |
| 4185              | Armour Vertagreen for Lawns &<br>Gardens 5-10-5                        | Vernon            |
| 3803              | Armour Vertagreen Plant Food 5-10-5<br>with 2,4-D Weed Killer          | Plantsville       |

~~~~~ indicates deficiencies.

⁵ Magnesium: Guaranteed, 1.20%; found, 1.68%.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen, per cent | | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|-----------------------|------------|-------------------|---------------------|-------------|------------------------------|-------|--------------------------|---------------------|-------------|
| Nitrate | Ammoniacal | Water- soluble | Water- insoluble | Total | Citrate- insoluble | Total | So-called "available" | As muriate | Total |
| 0.00 | 3.96 | 1.04 | 0.46 | 5.46 | 0.45 | 10.90 | 10.45 | 4.09 | 5.38 |
| | 3.28 | 2.69 | 0.33 | 6.30 | 0.35 | 10.90 | 10.55 | 3.01 | 4.21 |
| 0.15 | 5.28 | 0.00 | 0.17 | 5.60 | 0.33 | 8.80 | 8.47 | 6.76 | 8.54 |
| 1.37 | 3.44 | 0.08 | 0.11 | 5.00 | 0.38 | 10.40 | 10.02 | 6.61 | 10.12 |
| 0.35 | 2.48 | 4.44 | 2.91 | 10.18 | 0.30 | 6.32 | 6.02 | 2.93 | 4.05 |
| 0.39 | 3.68 | 3.16 | 3.37 | 10.60 | 0.20 | 6.45 | 6.25 | 2.55 | 4.62 |
| 0.00 | 2.52 | 2.52 | 0.42 | 5.46 | 0.85 | 9.90 | 9.05 | 3.33 | 6.35 |
| 0.48 | 3.04 | 1.68 | 0.58 | 5.78 | 0.47 | 9.30 | 8.83 | 4.85 | 6.52 |
| 1.52 | 3.88 | 0.04 | 0.00 | 5.44 | 0.45 | 20.60 | 20.15 | 15.64 | 20.13 |
| 2.48 | 6.08 | 6.24 | 0.20 | 15.00 | 0.38 | 10.70 | 10.32 | 6.69 | 10.04 |
| 0.00 | 2.88 | 2.04 | 0.87 | 5.79 | 0.50 | 9.50 | 9.00 | 4.74 | 6.04 |
| 0.34 | 7.24 | 1.20 | 0.78 | <u>9.43</u> | 0.60 | 7.15 | 6.55 | 3.28 | 4.27 |
| 0.33 | 4.52 | 0.20 | 0.25 | 5.30 | 0.30 | 10.40 | 10.10 | 4.01 | 5.07 |
| 0.27 | 0.24 | 0.20 | 4.29 | 5.00 | 1.30 | 6.80 | 5.50 | | |
| 0.40 | 3.76 | 0.24 | 0.16 | <u>4.56</u> | 0.75 | 9.45 | 8.70 | 4.97 | 7.68 |
| 0.56 | 4.56 | 0.24 | 0.00 | <u>5.36</u> | .65 | 11.67 | 11.02 | 3.64 | 6.24 |
| 0.54 | 4.40 | 0.08 | 0.00 | 5.02 | 0.75 | 10.80 | 10.05 | 6.99 | 10.30 |
| 0.46 | 4.96 | 0.00 | 0.14 | 5.56 | 0.85 | 12.05 | 11.20 | 2.54 | 5.31 |
| 0.44 | 7.28 | 1.60 | 0.00 | <u>9.32</u> | 0.45 | 7.85 | 7.40 | 1.00 | 4.59 |
| 0.54 | 5.60 | 0.08 | 0.10 | 6.32 | 0.95 | 11.50 | 10.55 | 6.29 | 11.03 |
| 0.72 | 5.12 | 0.16 | 0.00 | 6.00 | 1.30 | 13.65 | 12.35 | 6.39 | 12.58 |
| 0.60 | 6.96 | 1.92 | 0.00 | <u>9.48</u> | 0.45 | 10.80 | 10.35 | 4.24 | <u>9.18</u> |
| 0.50 | 3.28 | 0.64 | 0.94 | 5.36 | 0.60 | 11.20 | 10.60 | 9.44 | 10.12 |
| 0.32 | 4.80 | 0.16 | 0.00 | 5.28 | 0.85 | 10.92 | 10.07 | 0.86 | 5.16 |
| 0.42 | 4.60 | 0.08 | 0.30 | 5.40 | 0.40 | 10.20 | 9.80 | 1.65 | 5.63 |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|-------------|---|-------------------|
| 4199 | Armour Vertagreen Plant Food for Commercial Crops 3-12-12 | Vernon |
| 4201 | Armour Vertagreen Plant Food for Commercial Crops Tobacco Special 6-4-7 | Vernon |
| 4186 | Armour Vertagreen Plant Food for Turf & Trees 10-6-4 | Vernon |
| 4205 | Armour Vertagreen Rose Food 5-10-5 | East Windsor |
| 4188 | Armour Vertagreen 8-6-2 Turf Formula (50% Organic Nit.) | Vernon |
| 4183 | Armour Vertagreen Turf Food with Chlordane 10-6-4 | Vernon |
| | <u>ASGROW SEED CO.</u> New Haven, Conn. | |
| 4360 | Asgrow Weed-Nix Lawn Food 2, 4, D | Milford |
| 3975 | Asgrow Gro-Sod Lawn Food 15-5-5 | Darien |
| 4359 | Asgrow Gro-Sod Lawn Food 15-5-5 | Milford |
| | <u>F. A. BARTLETT TREE EXPERT</u> Co., Stamford, Conn. | |
| 4182 | Bartlett Green Tree Food 6-8-6 | Stamford |
| | <u>BENNETT & CLAYTON DIV., UN-EXCELLED CHEMICAL CORP.</u> Cranbury, N.J. | |
| 3946 | B/C Fertilizer 5-10-5 (25% Organic Nitrogen) | West Hartford |
| | <u>BOOHER LUMBER CO.</u> Syracuse, N.Y. | |
| 4052 | Timberturf | Branford |
| | <u>JOSEPH BRECK & SONS</u> Boston, Mass. | |
| 3808 | Breck's New Improved Turf-Gro 20-6-4 | Plainville |
| 3516 | Breck's Turf-Gro 8-6-2 | Hamden |
| | <u>BROOKSIDE NURSERIES, INC.</u> Darien, Conn. | |
| 4161 | Brookside's Natures Nutrients 6-6-8 | Darien |

~~~~~ indicates deficiencies.

## CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen,<br>per cent |            |                   |                     |              | Phosphoric acid,<br>per cent |             |                          | Potash,<br>per cent |             |
|-----------------------|------------|-------------------|---------------------|--------------|------------------------------|-------------|--------------------------|---------------------|-------------|
| Nitrate               | Ammoniacal | Water-<br>soluble | Water-<br>insoluble | Total        | Citrate-<br>insoluble        | Total       | So-called<br>"available" | As<br>muriate       | Total       |
|                       |            |                   |                     | 3.24         | 0.07                         | 13.10       | 13.03                    | 9.93                | 12.39       |
| 0.98                  | 2.96       | 1.52              | 0.54                | 6.00         | 0.75                         | 5.65        | 4.90                     | 1.10                | 7.61        |
| 0.36                  | 6.72       | 1.76              | 1.40                | 10.24        | 0.65                         | 7.35        | 6.70                     | 2.27                | 4.75        |
| 0.62                  | 3.60       | 0.16              | 1.06                | 5.44         | 0.78                         | 12.25       | 11.47                    | 2.15                | 5.57        |
| 0.50                  | 2.88       | 0.56              | 3.70                | <u>7.64</u>  | 1.00                         | 7.20        | 6.20                     | 1.53                | 2.37        |
| 0.26                  | 7.84       | 1.04              | 1.46                | 10.60        | 0.55                         | 6.20        | <u>5.65</u>              | 2.89                | <u>3.64</u> |
| 0.63                  | 3.68       | 6.08              | 3.06                | <u>13.45</u> | 0.85                         | 7.30        | 6.45                     |                     | 5.38        |
| 0.38                  | 4.56       | 6.40              | 3.66                | 15.00        | 0.25                         | 5.32        | 5.07                     | 0.92                | 6.28        |
| 0.72                  | 3.04       | 7.52              | 3.76                | 15.04        | 0.80                         | 5.90        | 5.10                     | 0.16                | 5.28        |
| 0.00                  | 5.20       | 0.28              | 0.92                | 6.40         | 0.50                         | 8.55        | 8.05                     | 3.40                | 6.04        |
| 0.99                  | 2.64       | 0.08              | 1.99                | 5.70         | 0.88                         | 12.00       | 11.12                    | 0.54                | 6.83        |
|                       |            |                   |                     | <u>1.08</u>  | 0.05                         | <u>0.20</u> | 0.15                     |                     | <u>0.47</u> |
| 0.87                  | 4.80       | 12.36             | 1.29                | <u>19.32</u> | 0.33                         | 6.55        | 6.22                     | 2.70                | 4.81        |
| 0.53                  | 4.92       | 0.56              | 1.27                | <u>7.28</u>  | 0.55                         | 7.45        | 6.90                     | 2.35                | 4.24        |
| 0.18                  | 0.00       | 0.72              | 4.66                | <u>5.56</u>  | 0.90                         | 10.80       | 9.90                     | 0.94                | <u>6.72</u> |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No.         | Manufacturer and brand                              | Place of sampling  |
|---------------------|-----------------------------------------------------|--------------------|
|                     | <u>W. ATLEE BURPEE CO.</u><br>Philadelphia, Pa.     |                    |
| 3441                | Burpee Lawn Food 20-10-5                            | Shelton            |
|                     | <u>CADWELL &amp; JONES, INC.</u><br>Hartford, Conn. |                    |
| 3927                | C & J Hi Organic 10-6-4 Fertilizer                  | Hartford           |
| 3939                | C & J Lawn Food-Weed Killer 20-10-5                 | Hartford           |
| 3928                | C & J Plant Food 5-10-5                             | Hartford           |
|                     | <u>PETER CASCIO NURSERY</u><br>West Hartford, Conn. |                    |
| 3944                | Cascio's High Organic 10-6-4 Lawn Food              | West Hartford      |
| 3945                | Cascio Professional 5-10-5 Lawn Food                | West Hartford      |
|                     | <u>CONSOLIDATED RENDERING CO.</u><br>Boston, Mass.  |                    |
| 3805                | Corenco 0-15-30 Fertilizer                          | Plantsville        |
| 3721 <sup>1,6</sup> | Corenco 0-15-30 with 0.11 Boron                     | Storrs             |
| 4032 <sup>1,7</sup> | Corenco 0-15-30-.11                                 | Newtown            |
| 4382                | Corenco 0-20-20 Fertilizer                          | Springfield, Mass. |
| 4410 <sup>1</sup>   | Corenco 0-20-20 Fertilizer                          | Niantic            |
| 3768 <sup>1,8</sup> | Corenco 0-20-20-.11                                 | Southbury          |
| 3794 <sup>1,9</sup> | Corenco 0-20-20 Fertilizer                          | Cheshire           |
| 3551                | Corenco 5-8-7 Fertilizer                            | New Haven          |
| 3774                | Corenco Fertilizer 5-8-7                            | Waterbury          |
| 3634                | Corenco 5-10-5                                      | Milford            |
| 3789 <sup>1</sup>   | Corenco 5-10-10 Fertilizer                          | Cheshire           |
| 4536 <sup>1</sup>   | Corenco Fertilizer 5-10-10                          | Meriden            |
| 4355 <sup>10</sup>  | Corenco Fertilizer 5-10-10-1.2<br>Magnesium         | West Haven         |
| 3724                | Corenco 7-7-7 Fertilizer                            | Southbury          |
| 3790 <sup>1</sup>   | Corenco 7-7-7 Fertilizer                            | Cheshire           |
| 4384 <sup>11</sup>  | Corenco 8-12-12-.9 Fertilizer                       | Springfield, Mass. |

~~~~~ indicates deficiencies.

¹ State purchase.

⁶ Boron: Guaranteed, 0.11%; found, 0.48%.

⁷ Boron: Guaranteed, 0.11%; found, 0.053%.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen, per cent | | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|-----------------------|------------|-------------------|---------------------|--------------|------------------------------|-------|--------------------------|---------------------|--------------|
| Nitrate | Ammoniacal | Water- soluble | Water- insoluble | Total | Citrate- insoluble | Total | So-called "available" | As muriate | Total |
| 0.72 | 9.60 | 5.36 | 5.12 | 20.80 | 0.05 | 10.35 | 10.30 | 1.86 | 5.50 |
| 0.26 | 3.24 | 4.52 | 0.78 | 8.80 | 0.35 | 7.77 | 7.42 | 2.96 | 5.47 |
| 0.19 | 2.96 | 11.52 | 2.97 | <u>17.64</u> | 0.53 | 11.15 | 10.62 | 2.63 | 5.28 |
| 1.40 | 3.96 | 0.16 | 0.10 | <u>5.62</u> | 0.33 | 11.17 | 10.84 | 3.84 | 5.47 |
| 0.98 | 3.92 | 3.12 | 1.36 | <u>9.38</u> | 0.30 | 7.45 | 7.15 | 2.60 | 5.28 |
| 1.15 | 1.44 | 2.56 | 0.29 | <u>5.44</u> | 0.50 | 10.15 | <u>9.65</u> | 4.66 | 6.11 |
| | | | | | 0.20 | 14.30 | <u>14.10</u> | 22.75 | <u>25.40</u> |
| | | | | | 0.27 | 15.30 | <u>15.03</u> | 22.43 | <u>26.00</u> |
| | | | | | 0.35 | 15.40 | 15.05 | 12.44 | <u>27.32</u> |
| | | | | | 0.43 | 20.60 | 20.17 | 17.58 | 20.13 |
| | | | | | 0.30 | 20.00 | <u>19.70</u> | 17.40 | 20.45 |
| | | | | | 0.30 | 20.00 | <u>19.70</u> | 15.52 | <u>19.30</u> |
| | | | | | 0.20 | 18.75 | <u>18.55</u> | 15.99 | <u>20.06</u> |
| 1.51 | 3.80 | 0.00 | 0.05 | 5.32 | 0.07 | 8.30 | 8.23 | 1.30 | 7.71 |
| 1.36 | 3.96 | 0.08 | 0.12 | 5.52 | 0.33 | 9.06 | 8.73 | 5.23 | 7.68 |
| 1.42 | 4.32 | 0.04 | 0.00 | 5.78 | 0.10 | 10.77 | 10.67 | 5.55 | 8.49 |
| 1.07 | 4.28 | 0.60 | 0.33 | 6.28 | 0.35 | 11.55 | 11.20 | 2.55 | <u>8.39</u> |
| 1.44 | 3.92 | 0.16 | 0.16 | 5.68 | 0.35 | 10.52 | 10.17 | 4.73 | <u>10.15</u> |
| 1.20 | 3.68 | 0.40 | 0.00 | 5.28 | 0.30 | 10.57 | 10.27 | 7.49 | 10.04 |
| 1.57 | 5.56 | 0.24 | 0.17 | 7.54 | 0.17 | 8.00 | 7.83 | 6.77 | 8.37 |
| 1.04 | 5.64 | 0.56 | 0.10 | 7.34 | 0.15 | 8.30 | 8.15 | 5.18 | 7.61 |
| 1.82 | 5.92 | 0.40 | 0.10 | 8.24 | 0.45 | 12.80 | 12.35 | 9.75 | 12.27 |

⁸ Boron: Guaranteed, 0.11%; found, 0.13%.⁹ Boron: Guaranteed, 0.11%; found, .080%.¹⁰ Magnesium: Guaranteed, 1.20%; found, 1.80%.¹¹ Magnesium: Guaranteed, 0.90%; found, 1.08%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|--------------------|---|--------------------|
| 3769 ¹ | Corenco 8-16-16 Fertilizer | Southbury |
| 4030 ¹ | Corenco 8-16-16 | Newtown |
| 4356 | Corenco 8-16-16 Fertilizer | West Haven |
| 4031 ¹ | Corenco 10-10-10 | Newtown |
| 4534 ¹ | Corenco Fertilizer 10-10-10 | Portland |
| 3631 | Corenco Golf & Lawn Special 10-6-4 | Wethersfield |
| 3727 ¹ | Corenco Golf & Lawn Special 10-6-4 | Southbury |
| 4327 ¹ | Corenco Golf & Lawn Special 10-6-4 (50% Organic Nit.) | New Britain |
| 4207 | Corenco Granular Form Fertilizer 10-6-4 | West Suffield |
| 3692 | Corenco 5-10-5 Home Garden Fertilizer | Thompsonville |
| 3546 | Corenco 8-6-4 Landscape | New Haven |
| 4552 | Corenco 5-10-10 Liquid Fertilizer Concentrate | West Haven |
| 4551 | Corenco 10-5-5 Liquid Green Concen- trated Fertilizer | West Haven |
| 3550 | Corenco Organic Turf Fertilizer | New Haven |
| 4354 | Corenco Organic Turf Fertilizer 5-5 | West Haven |
| 4381 | Corenco 6-3-6 Perfection Tobacco Grower | Springfield, Mass. |
| 3793 ¹ | Corenco 6-8-8 Potato Special | Cheshire |
| 3549 | Corenco 5-10-10 Fertilizer Premium Grade | New Haven |
| 3633 | Corenco 10-10-10 Premium Grade | Wethersfield |
| 4383 | Corenco Rhododendron, Azalea & Blueberry Special 7-7-7 | Springfield, Mass. |
| 4351 | Corenco 5-10-5 Rose Special | West Haven |
| 4206 ¹² | Corenco Spurz-On 3-2.5-1.5 | Thompsonville |
| 4352 | Corenco 10-8-2 Timberline Com- plete Tree Food | West Haven |
| 3442 | Corenco 8-6-4 Turf Green | Shelton |
| | <u>THE DAVEY TREE EXPERT CO.</u> Kent, Ohio | |
| 3609 | Davey Tree Food 12-4-4 | Old Greenwich |

~~~~~ indicates deficiencies.

<sup>1</sup> State purchase.

## CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen,<br>per cent |            |                   |                     |       | Phosphoric acid,<br>per cent |       |                          | Potash,<br>per cent |       |
|-----------------------|------------|-------------------|---------------------|-------|------------------------------|-------|--------------------------|---------------------|-------|
| Nitrate               | Ammoniacal | Water-<br>soluble | Water-<br>insoluble | Total | Citrate-<br>insoluble        | Total | So-called<br>"available" | As muriate          | Total |
| 1.51                  | 5.04       | 0.24              | 0.11                | 6.90  | 0.30                         | 16.10 | 15.80                    | 10.01               | 16.08 |
| 1.92                  | 5.92       | 0.16              | 0.00                | 8.00  | 0.40                         | 16.45 | 16.05                    | 15.44               | 16.26 |
| 1.90                  | 6.16       | 0.24              | 0.14                | 8.44  | 0.35                         | 15.10 | 14.75                    | 12.14               | 16.20 |
| 1.70                  | 8.16       | 0.32              | 0.00                | 10.18 | 0.30                         | 10.65 | 10.35                    | 0.48                | 10.26 |
| 1.68                  | 6.40       | 1.89              | 0.08                | 10.00 | 0.15                         | 10.27 | 10.12                    | 6.53                | 10.40 |
| 0.16                  | 5.04       | 4.16              | 1.00                | 10.36 | 0.20                         | 6.80  | 6.60                     | 3.76                | 4.68  |
| 0.25                  | 5.32       | 1.92              | 2.11                | 9.60  | 0.35                         | 7.60  | 7.25                     | 5.47                | 7.93  |
| 0.76                  | 5.76       | 2.56              | 1.36                | 10.44 | 0.45                         | 8.50  | 8.05                     | 5.95                | 7.98  |
| 1.20                  | 8.40       | 0.48              | 0.00                | 10.08 | 0.28                         | 6.57  | 6.29                     | 2.22                | 4.46  |
| 1.17                  | 3.40       | 0.12              | 0.11                | 4.80  | 0.22                         | 10.52 | 10.30                    | 3.85                | 5.38  |
| 0.08                  | 4.64       | 3.04              | 0.56                | 8.32  | 0.12                         | 6.40  | 6.28                     | 3.13                | 4.55  |
| 0.00                  | 3.20       | 1.96              |                     | 5.16  |                              | 10.05 | 10.05                    | 9.99                | 10.44 |
| 0.08                  | 1.60       | 7.98              |                     | 9.66  |                              | 5.00  | 5.00                     | 5.00                | 5.00  |
|                       | 0.24       | 0.43              | 4.85                | 5.52  | 0.90                         | 6.87  | 5.97                     |                     |       |
| 0.00                  | 0.00       | 0.80              | 4.20                | 5.00  | 0.83                         | 6.50  | 5.67                     |                     |       |
| 0.44                  | 0.00       | 2.40              | 3.16                | 6.00  | 0.20                         | 4.20  | 4.00                     | 0.17                | 6.07  |
| 0.77                  | 4.52       | 0.20              | 0.13                | 5.62  | 0.13                         | 9.40  | 9.27                     | 5.66                | 8.69  |
| 1.20                  | 3.96       | 0.24              | 0.10                | 5.50  | 0.22                         | 10.40 | 10.18                    | 7.53                | 9.76  |
| 1.55                  | 6.64       | 0.20              | 0.15                | 8.54  | 0.35                         | 11.77 | 11.42                    | 8.91                | 10.48 |
| 0.00                  | 5.44       | 0.08              | 1.64                | 7.16  | 0.30                         | 8.12  | 7.82                     | 5.50                | 7.61  |
| 0.18                  | 2.72       | 1.52              | 1.38                | 5.80  | 1.03                         | 12.20 | 11.17                    | 4.97                | 5.25  |
|                       |            |                   |                     | 3.64  |                              | 3.40  |                          |                     | 2.70  |
| 0.80                  | 2.08       | 3.20              | 4.52                | 10.60 | 0.25                         | 8.10  | 7.85                     | 2.79                | 3.56  |
| 0.30                  | 4.20       | 1.36              | 2.70                | 8.56  | 0.00                         | 6.30  | 6.30                     | 3.40                | 4.87  |
| 1.53                  | 9.64       |                   | 0.87                | 12.04 | 0.37                         | 4.65  | 4.28                     | 3.01                | 4.12  |

<sup>12</sup> Sand: 38.69%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No.        | Manufacturer and brand                                                             | Place of sampling |
|--------------------|------------------------------------------------------------------------------------|-------------------|
|                    | <u>DAVISON CHEMICAL CO.</u><br>Baltimore, Md.                                      |                   |
| 3707               | 0-15-30 Davco Granulated Fertilizer                                                | Willimantic       |
| 4046               | 0-20-20 Davco Granulated Fertilizer                                                | New Milford       |
| 3714               | 5-10-10 Davco 3-G Granulated Fertilizer                                            | Willimantic       |
| 3711               | 8-16-16 Davco 3-G Granulated Fertilizer                                            | Willimantic       |
| 3710               | Davco Turf & Garden Food 5-10-5                                                    | Willimantic       |
| 4047               | 10-6-4 Davco 3G Granulated Fertilizer                                              | New Milford       |
| 4040               | 10-10-10 Davco Granulated 3-G Fertilizer                                           | New Milford       |
| 4045               | 15-10-10 Davco 3-G Granulated Fertilizer                                           | New Milford       |
|                    | <u>DAYTON FERTILIZER CORP.</u><br>Dayton, N.J.                                     |                   |
| 3629               | Grand Garden 6-10-4                                                                | Wethersfield      |
| 3595               | Lawn Treat 10-6-4                                                                  | Greenwich         |
| 4036               | Lightweight Lawn Treat 14-8-4                                                      | Danbury           |
|                    | <u>E. I. DuPONT de NEMOURS &amp; CO.</u><br>INC. Wilmington, Del.                  |                   |
| 3679               | DuPont Turf Food 20-10-10                                                          | Stratford         |
|                    | <u>EASTERN STATES FARMERS'</u><br><u>EXCHANGE, INC.</u><br>West Springfield, Mass. |                   |
| 3994 <sup>13</sup> | Eastern States 0-15-30-.3                                                          | North Haven       |
| 3449               | Eastern States 0-25-25                                                             | Buckland          |
| 3716 <sup>14</sup> | Eastern States 5-10-10 SM-1.2                                                      | Willimantic       |
| 3998 <sup>15</sup> | Eastern States 5-10-10 SM-1.2                                                      | Buckland          |
| 3981 <sup>16</sup> | Eastern States 8-16-16-.6                                                          | North Haven       |
| 3995               | Eastern States 10-6-4                                                              | Buckland          |
| 3400 <sup>17</sup> | Eastern States 10-10-10-.6 Granular Fertilizer                                     | Granby            |

~~~~~ indicates deficiencies.

¹³ Boron: Guaranteed, 0.30%; found, 0.47%.

¹⁴ Magnesium: Guaranteed, 1.20%; found, 3.18%.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen, per cent | | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|-----------------------|------------|-------------------|---------------------|--------------|------------------------------|-------|--------------------------|---------------------|--------------|
| Nitrate | Ammoniacal | Water- soluble | Water- insoluble | Total | Citrate- insoluble | Total | So-called "available" | As muriate | Total |
| | | | | | 0.85 | 18.80 | 17.95 | 25.49 | 26.58 |
| | | | | | 0.90 | 21.60 | 20.70 | 18.17 | <u>20.20</u> |
| 0.68 | 4.12 | 0.20 | 0.00 | 5.00 | 0.22 | 10.50 | 10.28 | 8.79 | 10.30 |
| 1.93 | 5.72 | 0.24 | 0.11 | 8.00 | 0.35 | 16.35 | 16.00 | 13.64 | 16.08 |
| 0.74 | 5.08 | 0.08 | 0.00 | 5.90 | 0.30 | 10.81 | 10.51 | 4.63 | 6.52 |
| 0.80 | 2.72 | 1.12 | 4.90 | <u>9.54</u> | 0.25 | 6.82 | 6.57 | 2.88 | 4.52 |
| 2.46 | 6.80 | 0.40 | 0.00 | <u>9.66</u> | 0.25 | 10.30 | 10.05 | 7.76 | 10.08 |
| 2.84 | 10.08 | 1.24 | 0.00 | <u>14.16</u> | 0.35 | 10.85 | 10.50 | 6.88 | 10.12 |
| 1.07 | 4.67 | 0.33 | 0.19 | 6.26 | 0.40 | 11.00 | 10.60 | 3.61 | 4.59 |
| 0.67 | 4.56 | 3.20 | 1.81 | 10.24 | 0.37 | 6.42 | 6.05 | 3.72 | <u>4.18</u> |
| 1.01 | 10.40 | 0.88 | 1.17 | <u>13.46</u> | 0.55 | 8.60 | 8.05 | 3.49 | 4.18 |
| 0.57 | 2.88 | 6.08 | 12.09 | 21.62 | 0.05 | 10.80 | 10.75 | 4.08 | <u>9.50</u> |
| | | | | | 0.25 | 15.95 | 15.70 | 28.27 | 31.34 |
| | | | | | 0.42 | 25.95 | 25.53 | 22.96 | 25.06 |
| 1.38 | 3.56 | 0.56 | 0.00 | 5.50 | 0.20 | 11.12 | 10.92 | 7.97 | 10.30 |
| 1.34 | 3.52 | 0.44 | 0.00 | 5.30 | 0.28 | 12.30 | 12.02 | 7.32 | 10.08 |
| 2.42 | 5.52 | 0.56 | 0.00 | 8.50 | 0.33 | 17.20 | 16.87 | 12.80 | 16.01 |
| 0.00 | 5.80 | 2.32 | 2.46 | 10.58 | 0.15 | 6.90 | 6.75 | 1.91 | 4.46 |
| 2.48 | 6.92 | 0.80 | 0.26 | 10.46 | 0.22 | 10.25 | 10.03 | 8.96 | 10.51 |

¹⁵ Magnesium: Guaranteed, 1.20%; found 2.89%.

¹⁶ Magnesium: Guaranteed, 0.60%; found 0.80%.

¹⁷ Magnesium: Guaranteed, 0.60%; found 0.83%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|--------------------|---|-------------------|
| 3439 ¹⁸ | Eastern States 10-15-15-1.2 | Hazardville |
| 3997 ¹⁹ | Eastern States 10-15-15 L. C. -1.2 | Buckland |
| 3440 ²⁰ | Eastern States 10-20-10-.6 | Hazardville |
| 3983 | Eastern States 15-10-10 | North Haven |
| 3715 ²¹ | Eastern States Green Lawn 10-5-5-1.2 | Willimantic |
| 4035 ²² | Eastern States Green Lawn "Plus" 10-5-5-2. Fert. Plus Weed Killers | Bethel |
| 3479 | Eastern States Super Formula 15-15-15 Granular Fertilizer | Granby |
| | <u>ELLAR CHEMICAL DISTRIBUTORS</u> <u>INC. Lodi, N.J.</u> | |
| 4357 | Ellar's 5-10-5 Best | West Haven |
| | <u>THE ESPOMA CO.</u> <u>Millville, N.J.</u> | |
| 3584 | Espoma Organic 3-2-1 | Greenwich |
| 3955 | Holly-Tone 4-6-4 | Stamford |
| | <u>FAESY & BESTHOFF, INC.</u> <u>New York, N.Y.</u> | |
| 3691 ²³ | F & B Evergreen Food 7-7-7 | Thompsonville |
| | <u>FARMINGDALE GARDEN LABS. INC.</u> <u>Farmingdale, N.Y.</u> | |
| 3677 | Farmingdale 10-6-4 Uramite Green Turf | Stratford |
| | <u>FIRST NATIONAL STORES, INC.</u> <u>East Hartford, Conn.</u> | |
| 3663 | Emerald Green Lawn Food 12-5-7 | Milford |
| 3682 | Emerald Green Plant Food 8-12-6 | Thompsonville |
| | <u>THE GARDEN CENTER, INC.</u> <u>West Hartford, Conn.</u> | |
| 4544 | Garden Center Lawn Fertilizer 10-6-4 | West Hartford |

~~~~~ indicates deficiencies.

<sup>18</sup> Magnesium: Guaranteed, 1.20%; found, 1.58%.

<sup>19</sup> Magnesium: Guaranteed, 1.20%; found, 1.68%.

<sup>20</sup> Magnesium: Guaranteed, 0.60%; found 1.13%.



## CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen,<br>per cent |            |                   |                     |              | Phosphoric acid,<br>per cent |              |                          | Potash,<br>per cent |              |
|-----------------------|------------|-------------------|---------------------|--------------|------------------------------|--------------|--------------------------|---------------------|--------------|
| Nitrate               | Ammoniacal | Water-<br>soluble | Water-<br>insoluble | Total        | Citrate-<br>insoluble        | Total        | So-called<br>"available" | As muriate          | Total        |
| 2.22                  | 7.64       | 0.56              | 0.08                | 10.50        | 0.32                         | 15.55        | 15.23                    | 7.01                | 15.18        |
| 2.44                  | 7.12       | 0.44              | 0.00                | 10.00        | 0.35                         | 15.40        | 15.05                    | 1.81                | <u>14.26</u> |
| 2.73                  | 7.04       | 0.32              | 0.11                | 10.20        | 0.36                         | 21.80        | 21.44                    | 8.25                | <u>10.74</u> |
| 1.88                  | 11.44      | 1.72              | 0.00                | 15.04        | 0.15                         | 11.82        | 11.67                    | 7.66                | 10.22        |
| 0.13                  | 2.60       | 3.46              | 4.39                | 10.56        | 0.07                         | 5.75         | 5.68                     | 3.41                | 5.57         |
| 1.24                  | 2.68       | 3.16              | 3.46                | 10.54        | 0.48                         | 6.00         | 5.52                     | 3.69                | 5.31         |
| 2.04                  | 12.24      | 0.72              | 0.00                | 15.00        | 0.00                         | 14.30        | <u>14.30</u>             | 12.24               | 15.00        |
| 1.36                  | 3.92       | 0.08              | 0.00                | 5.36         | 0.25                         | 10.55        | 10.30                    | 2.63                | <u>4.24</u>  |
| 0.12                  | 2.36       | 0.52              | 1.66                | 3.94<br>4.66 | 0.30<br>0.45                 | 3.30<br>7.47 | 3.00<br>7.02             | 0.56<br>3.05        | 2.75<br>4.55 |
| 0.81                  | 3.36       | 0.28              | 2.55                | 7.00         | 0.62                         | 8.27         | 7.65                     | 5.71                | <u>6.52</u>  |
| 1.74                  | 2.96       | 4.36              | 1.16                | 10.22        | 0.45                         | 7.32         | 6.87                     | 3.97                | 5.16         |
| 0.54                  | 9.88       | 1.32              | 0.54                | 12.28        | 0.12                         | 5.80         | 5.68                     | 5.58                | 7.47         |
| 1.22                  | 5.92       | 0.56              | 0.58                | 8.28         | 0.70                         | 12.75        | 12.05                    | 4.70                | 6.42         |
| 0.72                  | 4.96       | 3.02              | 1.30                | 10.00        | 0.70                         | 7.40         | 6.70                     | 3.03                | 4.12         |

<sup>21</sup> Magnesium: Guaranteed, 1.20%; found, 4.58%.

<sup>22</sup> Magnesium: Guaranteed, 2.00%; found, 3.80%.

<sup>23</sup> Iron: Guaranteed, 0.15%; found, 3.17%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No.        | Manufacturer and brand                                    | Place of sampling |
|--------------------|-----------------------------------------------------------|-------------------|
|                    | <u>GLEN TERRACE NURSERIES INC.</u><br>Hamden, Conn.       |                   |
| 3515               | Glen Terrace Lawn Food 10-6-4                             | Hamden            |
|                    | <u>GODFREY'S GARDEN SHOP</u><br>Fairfield, Conn.          |                   |
| 4361               | Godfrey's Lawn & Tree Food 10-6-4                         | Fairfield         |
|                    | <u>GOULARD &amp; OLENA, INC.</u><br>Skillman, N.J.        |                   |
| 3922               | G&O Evergreen Tree & Shrub Food<br>9-7-4                  | Manchester        |
| 4540               | G&O Food for Bulbs 5-6-15                                 | West Hartford     |
| 3907               | G&O Hyganic Lawn Food 10-6-4<br>with Ureaform             | Manchester        |
| 3921               | G&O Light Fantastic Lawn Food<br>20-6-4                   | Manchester        |
| 3929               | G&O Plant Food 6-10-4                                     | Hartford          |
| 3920               | G&O Prizegro Plant Food 5-10-5                            | Manchester        |
| 3931 <sup>24</sup> | G&O Rose Food 7-8-5                                       | Hartford          |
| 3947               | G&O Turf Food & Insecticide 10-6-4<br>with Chlordane      | West Hartford     |
| 3948               | Goulard's Formula 8-15-5                                  | West Hartford     |
|                    | <u>GREEN-D PRODUCTS, INC.</u><br>Huntington Station, N.Y. |                   |
| 3833               | Green D Lawn Food DeLuxe 100%<br>Organic Nitrogen 10-6-4  | Norwalk           |
| 3838               | Green D 40% Organic Nitrogen Rose<br>Food 5-9-4           | Norwalk           |
| 3834               | Green D 50% Organic Nitrogen 10-6-4                       | Norwalk           |
| 3839               | Green D 60% Organic Nitrogen Azalea<br>Food 4-8-8         | Norwalk           |
| 3835               | Green-Gro All-Purpose Economy<br>Fertilizer 5-10-5        | Norwalk           |
| 3836               | Green-Gro Economy Lawn & Turf<br>Fertilizer 10-6-4        | Norwalk           |
|                    | <u>HALSTEAD DISTRIBUTING CORP.</u><br>Mount Kisco, N.Y.   |                   |
| 3962               | Just Right 5-10-5                                         | Darien            |
| 3961               | Just Right Turf Food 10-6-4                               | Darien            |

~~~~~ indicates deficiencies.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen, per cent | | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|-----------------------|------------|-------------------|---------------------|-------------|------------------------------|-------|--------------------------|---------------------|--------------|
| Nitrate | Ammoniacal | Water- soluble | Water- insoluble | Total | Citrate- insoluble | Total | So-called "available" | As muriate | Total |
| 0.43 | 5.08 | 3.92 | 1.63 | 11.06 | 0.42 | 7.05 | 6.63 | 3.35 | 4.30 |
| 0.26 | 5.12 | 3.36 | 1.26 | 10.00 | 0.40 | 7.45 | 7.05 | 3.15 | 4.33 |
| 0.13 | 6.04 | 2.00 | 1.61 | 9.78 | 0.43 | 7.70 | 7.27 | 4.91 | 5.25 |
| 0.54 | 3.76 | 0.32 | 1.06 | 5.68 | 0.38 | 6.85 | 6.47 | 11.16 | <u>13.70</u> |
| 0.39 | 5.48 | 2.36 | 1.95 | 10.18 | 0.78 | 6.90 | 6.12 | 1.79 | 4.21 |
| 0.67 | 4.44 | 7.92 | 6.01 | 19.04 | 0.10 | 5.35 | <u>5.25</u> | 2.68 | 4.27 |
| 0.96 | 4.84 | 0.32 | 0.24 | <u>6.36</u> | 0.78 | 11.02 | 10.24 | 2.01 | 4.55 |
| 0.97 | 3.04 | 0.36 | 1.31 | 5.68 | 0.65 | 11.30 | 10.65 | 5.21 | 6.45 |
| 0.75 | 4.56 | 0.52 | 1.99 | 7.82 | 0.28 | 8.55 | 8.27 | 4.77 | 5.19 |
| 0.84 | 5.52 | 2.08 | 1.56 | 10.00 | 0.38 | 6.75 | 6.37 | 4.12 | 4.68 |
| 1.06 | 0.36 | 3.08 | 3.08 | <u>7.58</u> | 0.70 | 16.72 | 16.02 | 0.78 | 5.70 |
| 0.60 | 0.00 | 4.96 | 4.80 | 10.36 | 0.28 | 6.70 | 6.42 | 4.18 | 4.62 |
| 0.59 | 2.48 | 0.60 | 2.83 | 6.50 | 0.68 | 10.00 | 9.32 | 2.86 | 3.86 |
| 1.25 | 5.00 | 1.72 | 2.03 | 10.00 | 0.53 | 7.12 | 6.59 | 3.31 | 4.97 |
| 0.50 | 1.84 | 0.38 | 1.88 | 4.60 | 0.63 | 8.90 | 8.27 | 5.29 | 8.15 |
| 1.22 | 3.80 | 0.28 | 0.14 | 5.44 | 0.43 | 11.15 | 10.72 | 2.39 | 5.07 |
| 1.55 | 7.68 | 0.20 | 0.25 | <u>9.68</u> | 0.13 | 7.60 | 7.47 | 1.93 | 4.24 |
| 0.00 | 4.60 | 0.44 | 0.24 | 5.28 | 0.55 | 10.62 | 10.07 | 4.37 | 5.31 |
| 0.44 | 5.04 | 2.68 | 2.34 | 10.50 | 0.68 | 6.68 | 6.00 | 4.04 | 4.87 |

²⁴ Iron: Guaranteed, 0.15%; found, 0.29%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|--------------------|---|-------------------|
| | <u>THE CHARLES C. HART SEED CO.</u> Wethersfield, Conn. | |
| 3628 | Hart's All Organic 5-4-0 | Wethersfield |
| 3620 | Hart's All Purpose Plant Food 5-10-5 | Wethersfield |
| 3617 | Hart's Turf Food 20-10-5 | Wethersfield |
| 3616 | Hart's Two-for-One 10-6-4 | Wethersfield |
| | <u>HERSHEY ESTATES, INC.</u> Hershey, Pa. | |
| 4324 | Ko-K-O Meal 3-1-3 | Bristol |
| | <u>THE HUBBARD-HALL CHEMICAL CO.</u> Waterbury, Conn. | |
| 3898 | Green Gro Lawn Fertilizer 6-7-4 | Norwich |
| 3547 | Green Ribbon Lawn Food 10-6-4 | Hamden |
| 4000 | Green Ribbon Plant Food All Purpose 5-10-5 | Manchester |
| 3672 | H-H Blade Lawn Food 20-6-4 | Bridgeport |
| 3675 | H-H Evergreen Food 4-10-4 | Bridgeport |
| 4512 | H-H Gro Mor Garden Fertilizer 5-10-10 | Portland |
| 4157 | H-H Lawn Fertilizer with Chlordane Added 8-6-4 | Clinton |
| 3712 | H-H Luxura Lawn Food with Urea- Form 10-5-5 | Willimantic |
| 3709 | H-H Nitrogranic 5-4-0 | Southbury |
| 4511 | H-H Plant Food 5-10-5 | Portland |
| 4531 | H-H Rose Food 7-10-5 | Portland |
| 3809 | H-H Turf & Tree Food | Plainville |
| 4180 | H-H Weed-Kil Lawn Food with 2,4-D 6-10-4 | Ridgefield |
| 4412 | Lawn Craft Turf Fertilizer for Pro- fessional Use 10-6-4 | Portland |
| 4510 | Lawn Craft 8-6-4 Turf Food | Portland |
| 3725 | Liberty Fertilizer 0-15-30 | Southbury |
| 4403 | Liberty Fertilizer 0-20-20 | Windsorville |
| 4038 | Liberty Fertilizer 5-8-7 | Danbury |
| 3576 | Liberty Fertilizer 5-10-5 | Hamden |
| 3896 | Liberty Fertilizer 5-10-10 | Norwich |
| 4204 ²⁵ | Liberty Fertilizer 6-8-8-1.2 | East Windsor Hill |

~~~~~ indicates deficiencies.



## CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen,<br>per cent |            |                   |                     |       | Phosphoric acid,<br>per cent |       |                          | Potash,<br>per cent |       |
|-----------------------|------------|-------------------|---------------------|-------|------------------------------|-------|--------------------------|---------------------|-------|
| Nitrate               | Ammoniacal | Water-<br>soluble | Water-<br>insoluble | Total | Citrate-<br>insoluble        | Total | So-called<br>"available" | As<br>muriate       | Total |
| 0.00                  | 0.00       | 0.36              | 4.92                | 5.28  | 0.65                         | 4.87  | 4.22                     |                     |       |
| 1.36                  | 4.16       | 0.36              | 0.12                | 6.00  | 0.12                         | 10.12 | 10.00                    | 3.76                | 5.66  |
| 0.23                  | 5.36       | 10.93             | 3.65                | 20.16 | 0.00                         | 10.67 | 10.67                    | 3.86                | 5.57  |
| 0.24                  | 2.60       | 13.04             | 0.42                | 16.30 | 0.15                         | 8.85  | 8.70                     | 1.70                | 5.05  |
|                       |            |                   |                     | 3.40  | 0.15                         | 1.60  | 1.45                     |                     | 3.07  |
| 1.25                  | 3.52       | 0.44              | 0.79                | 6.00  | 0.45                         | 8.05  | 7.60                     | 3.33                | 4.55  |
| 0.67                  | 9.68       | 0.40              | 0.23                | 10.98 | 0.15                         | 6.97  | 6.82                     | 2.72                | 4.55  |
| 1.32                  | 3.40       | 0.28              | 0.00                | 5.00  | 0.48                         | 11.55 | 11.07                    | 3.85                | 5.47  |
| 0.28                  | 4.80       | 13.92             | 0.76                | 19.76 | 0.12                         | 6.87  | 6.75                     | 1.83                | 4.39  |
| 0.00                  | 2.96       | 1.57              | 0.95                | 5.48  | 0.30                         | 10.95 | 10.65                    | 2.76                | 5.15  |
| 1.16                  | 3.44       | 0.48              |                     | 5.08  | 0.50                         | 10.90 | 10.40                    | 9.11                | 10.15 |
| 0.38                  | 3.36       | 2.80              | 0.96                | 7.50  | 0.55                         | 7.87  | 7.32                     | 1.46                | 4.08  |
| 0.55                  | 2.96       | 4.32              | 2.31                | 10.14 | 0.32                         | 7.55  | 7.23                     | 2.83                | 5.22  |
| 0.00                  | 0.12       | 0.39              | 4.65                | 5.16  | 0.90                         | 5.60  | 4.70                     |                     |       |
| 0.80                  | 2.24       | 1.28              | 1.04                | 5.36  | 0.70                         | 10.57 | 9.87                     | 2.63                | 5.07  |
| 0.22                  | 3.84       | 2.72              | 1.22                | 8.00  | 0.20                         | 11.15 | 10.95                    | 0.25                | 5.57  |
| 0.00                  | 5.80       | 3.44              | 1.42                | 10.66 | 0.43                         | 7.00  | 6.57                     | 3.09                | 4.46  |
| 0.86                  | 4.32       | 0.40              | 0.74                | 6.32  | 0.37                         | 10.20 | 9.83                     | 3.03                | 4.05  |
| 0.00                  | 6.88       | 2.86              | 0.26                | 10.00 | 0.30                         | 7.87  | 7.57                     | 2.86                | 4.18  |
| 0.20                  | 4.32       | 2.56              | 0.92                | 8.00  | 0.45                         | 7.22  | 6.77                     | 3.00                | 4.33  |
|                       |            |                   |                     |       | 0.60                         | 15.77 | 15.17                    | 21.12               | 27.38 |
|                       |            |                   |                     |       | 0.50                         | 18.70 | 18.20                    | 17.77               | 20.33 |
| 0.79                  | 3.88       | 0.40              | 0.15                | 5.22  | 0.38                         | 9.20  | 8.82                     | 6.32                | 7.10  |
| 0.47                  | 4.08       | 2.12              | 0.47                | 7.14  | 0.05                         | 9.20  | 9.15                     | 4.51                | 5.66  |
| 0.84                  | 3.76       | 0.52              | 0.00                | 5.12  | 0.10                         | 11.02 | 10.92                    | 7.81                | 10.63 |
| 0.80                  | 4.80       | 0.56              | 0.00                | 6.16  | 0.40                         | 9.95  | 9.55                     | 5.64                | 8.35  |

<sup>25</sup> Magnesium: Guaranteed, 1.20%; found, 2.82%.



TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No.        | Manufacturer and brand                                | Place of sampling |
|--------------------|-------------------------------------------------------|-------------------|
| 4413 <sup>26</sup> | Liberty Fertilizer 6-8-8-1.2                          | Portland          |
| 3897               | Liberty Fertilizer 7-7-7                              | Norwich           |
| 4515 <sup>27</sup> | Liberty Fertilizer 8-12-12-1.2                        | Portland          |
| 4319               | Liberty Fertilizer 8-16-16                            | Torrington        |
| 3773               | Liberty Fertilizer 10-6-4                             | Waterbury         |
| 3726               | Liberty Fertilizer 10-10-10                           | Southbury         |
| 4390               | Liberty Fertilizer 15-10-10                           | Windsorville      |
| 4407               | Liberty High Grade Tobacco Fertilizer                 | Windsorville      |
| 4391               | Liberty Super Corn 10-10-10 Fert-<br>ilizer           | Windsorville      |
| 4408 <sup>28</sup> | Liberty Super Gro 5-10-10-1.2                         | Windsorville      |
| 4402 <sup>29</sup> | Liberty Super Gro 6-12-12-1.2<br>Fertilizer           | Windsorville      |
| 4514 <sup>30</sup> | Liberty Super Spud 8-10-10-1.2                        | Portland          |
| 4405               | Liberty Tobacco Fertilizer 6-3-6<br>(Half & Half)     | Windsorville      |
| 4406               | Liberty Tobacco Fertilizer 6-3-6                      | Windsorville      |
| 3574               | Woodruff's 10-5-5 Lawn & Tree Food                    | Hamden            |
| 3719 <sup>1</sup>  | Woodruff's Lawn & Tree Food 10-5-5                    | Storrs            |
|                    | <u>KEN-BRIS FARMS, INC.</u><br>Philadelphia, Pa.      |                   |
| 3655               | Society Hill Lawn Feeder 20-10-5                      | Hartford          |
| 3656               | Society Hill Weeder-Feeder 10-6-4                     | Hartford          |
|                    | <u>LAWN &amp; GRASS SEEDS, INC.</u><br>Buffalo, N. Y. |                   |
| 3615               | Fabulawn Lawn Fertilizer 20-10-5                      | Orange            |
| 3614               | Fabulawn Weed & Feed 20-10-5                          | Orange            |
|                    | <u>LAWN-TEX INC.</u><br>Chicago, Ill.                 |                   |
| 3963               | Organi-Green 5-5-0                                    | Darien            |
|                    | <u>LEBANON CHEMICAL CORP.</u><br>Lebanon, Pa.         |                   |
| 3653               | Lebanon Rose Food 7-7-7                               |                   |

~~~~~ indicates deficiencies.

¹ State purchase.²⁶ Magnesium: Guaranteed, 1.20%; found, 1.76%.²⁷ Magnesium: Guaranteed, 1.20%; found, 1.87%.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen, per cent | | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|-----------------------|------------|-------------------|---------------------|-------|------------------------------|-------|--------------------------|---------------------|-------|
| Nitrate | Ammoniacal | Water- soluble | Water- insoluble | Total | Citrate- insoluble | Total | So-called "available" | As muriate | Total |
| 0.84 | 4.88 | 0.48 | | 6.20 | 0.40 | 9.27 | 8.87 | 5.80 | 8.39 |
| 1.24 | 5.52 | 0.24 | 0.00 | 7.00 | 0.10 | 6.70 | 6.60 | 8.14 | 12.43 |
| 1.28 | 5.92 | 0.56 | | 7.76 | 0.30 | 12.30 | 12.00 | 4.82 | 12.43 |
| 2.00 | 5.68 | 0.00 | 0.00 | 7.68 | 0.70 | 16.75 | 16.05 | 13.28 | 16.08 |
| 0.00 | 8.92 | 1.44 | 0.00 | 10.36 | 0.25 | 6.75 | 6.50 | 1.87 | 4.24 |
| 0.00 | 8.72 | 1.16 | 0.34 | 10.22 | 0.47 | 11.60 | 11.13 | 6.73 | 10.08 |
| 1.88 | 11.28 | 0.96 | | 14.12 | 0.35 | 10.82 | 10.47 | 7.88 | 10.37 |
| 1.16 | 0.00 | 1.36 | 2.90 | 5.42 | 0.10 | 4.10 | 4.00 | 0.17 | 6.35 |
| 1.92 | 7.36 | 0.16 | 0.24 | 9.68 | 0.35 | 10.77 | 10.42 | 6.57 | 10.45 |
| 0.00 | 3.92 | 1.40 | 0.00 | 5.32 | 0.40 | 10.85 | 10.45 | 7.49 | 10.30 |
| 0.78 | 4.72 | 0.56 | 0.30 | 6.36 | 0.30 | 12.80 | 12.50 | 9.35 | 12.43 |
| 1.28 | 5.84 | 0.24 | | 7.36 | 0.35 | 10.70 | 10.35 | 4.95 | 10.44 |
| 1.64 | 0.00 | 1.76 | 2.60 | 6.00 | 0.05 | 3.60 | 3.55 | 0.32 | 6.55 |
| 1.94 | 0.00 | 1.92 | 2.14 | 6.00 | 0.15 | 3.80 | 3.65 | 0.24 | 6.59 |
| 0.62 | 3.28 | 5.36 | 0.74 | 10.00 | 0.27 | 5.70 | 5.43 | 4.93 | 5.94 |
| 0.00 | 2.28 | 6.22 | 1.12 | 9.62 | 0.55 | 7.17 | 6.62 | 5.30 | 6.38 |
| 0.00 | 3.16 | 16.44 | 1.98 | 21.58 | 0.00 | 10.55 | 10.55 | | 5.47 |
| 0.25 | 4.48 | 5.48 | 1.43 | 11.64 | 0.10 | 6.20 | 6.10 | 2.66 | 4.70 |
| 0.90 | 2.40 | 16.96 | 0.16 | 20.42 | 0.25 | 10.40 | 10.15 | 5.39 | 6.77 |
| 0.58 | 3.48 | 15.88 | 0.18 | 20.12 | 0.27 | 10.70 | 10.43 | 1.99 | 6.47 |
| 0.00 | 0.00 | 0.74 | 4.86 | 5.60 | 0.90 | 6.25 | 5.35 | | |
| 0.52 | 4.52 | 0.28 | 1.30 | 6.62 | 0.30 | 8.95 | 8.65 | 4.81 | 6.42 |

²⁸ Magnesium: Guaranteed, 1.20%; found, 1.44%.

²⁹ Magnesium: Guaranteed, 1.20%; found, 1.20%.

³⁰ Magnesium: Guaranteed, 1.20%; found, 1.94%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|--------------------|--|-------------------|
| 3626 | Lebanon Truck Crop 5-10-5 | Wethersfield |
| 3940 | Lebanon Turf Organic 5-4-0 | Hartford |
| 4548 ³¹ | Lebanon Uni-Form 10-6-4 Chelated Iron | W. Hartford |
| | <u>LEE PATTON SEED CO.</u> Jersey City, N.J. | |
| 4056 | Patco's Combo 10-6-4 | Guilford |
| 3902 | Patco's Featherweight 20-10-5 | Buckland |
| 4051 | Patco's Lawn Food 9-8-3 | Branford |
| | <u>THE MAMLON CO.</u> New Haven, Conn. | |
| 4209 | Fer-Mel General Purpose Plant Food 18-18-18 | New Haven |
| 3517 | Fer-Mel Lawn Food 25-12-10 | Hamden |
| 4208 | Fer-Mel Water Soluble Turf & Tree Food 24-12-12 | New Haven |
| | <u>MASS. NURSERYMEN'S ASSOC.</u> Quincy, Mass. | |
| 3694 | MNA Plant-O-Ganic 8-8-8 | Thompsonville |
| 3693 | MNA Turf-O-Ganic 10-6-4 | Thompsonville |
| | <u>MC ARDLE'S SEED CO.</u> Greenwich, Conn. | |
| 3583 | McArdle's 10-6-4 | Greenwich |
| | <u>OLD FOX AGRICULTURAL SALES INC.,</u> East Providence, R.I. | |
| 3699 | Green Lawn 8-6-4 | Hazardville |
| 3705 | Old Fox Brand 0-15-30 | Hazardville |
| 4388 | Old Fox Brand 4-16-20 | Hazardville |
| 4015 | Old Fox Brand 5-10-10 | Hazardville |
| 4389 ³² | Old Fox Brand 5-10-10-1.2 | Hazardville |
| 4012 ³³ | Old Fox Brand 6-8-8-1.2 | Hazardville |

~~~~~ indicates deficiencies.

<sup>31</sup> Iron: Guaranteed, 0.15%; found, 2.25%.

## CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen,<br>per cent |            |                   |                     |             | Phosphoric acid,<br>per cent |       |                          | Potash,<br>per cent |              |
|-----------------------|------------|-------------------|---------------------|-------------|------------------------------|-------|--------------------------|---------------------|--------------|
| Nitrate               | Ammoniacal | Water-<br>soluble | Water-<br>insoluble | Total       | Citrate-<br>insoluble        | Total | So-called<br>"available" | As muriate          | Total        |
| 1.47                  | 3.48       | 0.16              | 0.11                | 5.22        | 0.15                         | 10.30 | 10.15                    | 2.62                | 4.59         |
| 0.16                  | 0.00       | 0.24              | 4.84                | 5.24        | 1.10                         | 5.95  | 4.85                     |                     |              |
| 0.36                  | 1.60       | 3.00              | 4.84                | <u>9.80</u> | 0.60                         | 6.90  | 6.30                     | 2.00                | <u>3.73</u>  |
| 1.02                  | 4.00       | 2.48              | 2.62                | 10.12       | 0.35                         | 6.37  | 6.02                     | 1.22                | 4.33         |
| 0.00                  | 2.80       | 16.56             | 3.80                | 23.16       | 0.30                         | 10.42 | 10.12                    | 2.55                | 5.10         |
| 0.81                  | 5.44       | 2.28              | 1.03                | 9.56        | 0.40                         | 8.57  | 8.17                     | 2.32                | 3.44         |
| 2.50                  | 4.08       | 11.42             | 0.00                | 18.00       | 0.04                         | 20.45 | 20.41                    | 14.26               | 18.66        |
| 0.03                  | 2.92       | 22.24             | 1.11                | 26.30       | 0.00                         | 10.47 | <u>10.47</u>             | 6.16                | 10.40        |
| 0.76                  | 3.52       | 19.84             | 0.00                | 24.12       | 0.05                         | 13.05 | 13.00                    | 8.99                | 12.46        |
| 0.25                  | 1.76       | 1.24              | 4.75                | 8.00        | 0.40                         | 8.62  | 8.22                     | 5.88                | <u>7.33</u>  |
| 1.14                  | 2.12       | 1.76              | 6.16                | 11.18       | 0.42                         | 7.30  | 6.88                     | 3.19                | 4.30         |
| 0.88                  | 3.84       | 3.12              | 1.86                | <u>9.70</u> | 0.50                         | 7.92  | 7.42                     | 4.61                | 4.84         |
| 0.54                  | 6.48       | 0.40              | 0.00                | <u>7.42</u> | 0.05                         | 7.25  | 7.20                     | 2.47                | 4.97         |
|                       |            |                   |                     |             | 0.17                         | 15.17 | 15.00                    | 25.55               | <u>29.22</u> |
| 0.70                  | 2.64       | 0.08              | 0.14                | <u>3.56</u> | 0.35                         | 15.50 | <u>15.15</u>             | 14.82               | <u>18.91</u> |
| 0.68                  | 3.64       | 0.12              | 0.10                | <u>4.54</u> | 0.38                         | 11.85 | 11.47                    | 7.24                | <u>12.86</u> |
| 1.36                  | 3.28       | 0.24              | 0.12                | <u>5.00</u> | 0.40                         | 10.75 | 10.35                    | 8.42                | 10.59        |
| 0.57                  | 5.08       | 0.24              | 0.11                | 6.00        | 0.30                         | 9.47  | 9.17                     | 5.50                | 8.25         |

<sup>32</sup> Magnesium: Guaranteed, 1.20%; found, 3.01%.

<sup>33</sup> Magnesium: Guaranteed, 1.20%; found, 1.96%.



TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No.        | Manufacturer and brand                                 | Place of sampling |
|--------------------|--------------------------------------------------------|-------------------|
| 4011 <sup>34</sup> | Old Fox Brand 6-10-10-1.2                              | Hazardville       |
| 4010 <sup>35</sup> | Old Fox Brand 8-10-10-1.2                              | Hazardville       |
| 3787 <sup>1</sup>  | Old Fox Brand 10-10-10                                 | Mt. Carmel        |
| 4029               | Old Fox Brand 15-10-10                                 | Hazardville       |
| 3788 <sup>1</sup>  | Old Fox Brand Tobacco Fertilizer<br>6-3-6              | Mt. Carmel        |
| 4013               | Old Fox Brand Tobacco Fertilizer<br>6-3-6              | Hazardville       |
| 4008 <sup>36</sup> | Old Fox Brand Tobacco Fertilizer<br>6-3-6-1.2          | Hazardville       |
| 3695               | Old Fox Garden Food 5-10-5                             | Thompsonville     |
| 3776 <sup>1</sup>  | Old Fox Garden Food 5-10-5                             | Mt. Carmel        |
| 4014               | Old Fox No Pest Turf Food 8-6-2                        | Hazardville       |
| 3700               | Old Fox Turf Food 8-6-2                                | Hazardville       |
| 3775 <sup>1</sup>  | Old Fox Turf Food 10-6-4                               | Mt. Carmel        |
| 4386               | Old Fox Turf Food with Urea-Form<br>10-6-4             | Hazardville       |
| 3520 <sup>1</sup>  | Old Fox Turf Food with Urea-Form<br>10-6-4             | New Haven         |
|                    | <u>OLIN MATHIESON CHEMICAL CORP.</u><br>Houston, Texas |                   |
| 3926               | Ammo-Phos 13-13-13                                     | New Haven         |
|                    | <u>PAX COMPANY</u><br>Salt Lake City, Utah             |                   |
| 4521               | New Pax Crabgrass & Soil Pest<br>Control 4-0-0         | Portland          |
|                    | <u>FRANK S. PLATT CO.</u><br>Branford, Conn.           |                   |
| 4049               | Platt's Hi Organic Lawn Fertilizer<br>10-5-5           | Branford          |
|                    | <u>PROSPECT MANUFACTURING CO.</u><br>Cranbury, N. J.   |                   |
| 3837               | Lawn & Garden Food 10-6-4                              | Norwalk           |

~~~~~ indicates deficiencies.

¹ State purchase.

³⁴ Magnesium: Guaranteed, 1.20%; found, 1.70%.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen, per cent | | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|-----------------------|------------|-------------------|---------------------|--------------|------------------------------|-------|--------------------------|---------------------|-------|
| Nitrate | Ammoniacal | Water- soluble | Water- insoluble | Total | Citrate- insoluble | Total | So-called "available" | As muriate | Total |
| 0.83 | 4.56 | 0.16 | 0.47 | 6.02 | 0.15 | 10.50 | 10.35 | 6.48 | 10.51 |
| 0.51 | 5.72 | 0.44 | 0.47 | <u>7.14</u> | 0.38 | 11.15 | 10.77 | 6.73 | 10.19 |
| 1.12 | 7.68 | 0.24 | 0.58 | <u>9.62</u> | 0.15 | 10.82 | 10.67 | 8.49 | 11.47 |
| 1.24 | 11.48 | 0.60 | 0.00 | <u>13.32</u> | 0.40 | 10.75 | 10.35 | 2.58 | 10.63 |
| 0.38 | 1.08 | 2.76 | 2.42 | 6.64 | 0.13 | 3.80 | 3.67 | 0.21 | 6.14 |
| 0.51 | 0.88 | 2.68 | 2.39 | 6.46 | 0.28 | 3.55 | 3.27 | 0.41 | 6.04 |
| 0.80 | 0.80 | 1.72 | 2.68 | 6.00 | 0.33 | 3.57 | 3.24 | 1.20 | 6.86 |
| 0.55 | 3.20 | 0.18 | 0.17 | <u>4.10</u> | 0.10 | 12.05 | 11.95 | 4.44 | 6.23 |
| 0.66 | 4.04 | 0.12 | 0.18 | <u>5.00</u> | 0.20 | 11.80 | 11.60 | 2.81 | 6.62 |
| 0.32 | 1.48 | 3.08 | 1.96 | <u>6.84</u> | 0.07 | 4.65 | <u>4.58</u> | 0.19 | 6.26 |
| 2.00 | 4.44 | 1.60 | 0.00 | <u>8.04</u> | 0.35 | 6.67 | <u>6.32</u> | 2.47 | 3.43 |
| 0.81 | 9.20 | 0.48 | 0.15 | 10.64 | 0.13 | 8.75 | 8.62 | 2.84 | 5.09 |
| 0.90 | 3.12 | 1.52 | 4.18 | <u>9.72</u> | 0.40 | 7.20 | 6.80 | 4.69 | 4.87 |
| 0.47 | 4.68 | 3.04 | 2.35 | 10.54 | 0.17 | 6.60 | 6.43 | 3.54 | 5.03 |
| 0.00 | 12.72 | 0.52 | 0.00 | 13.24 | 0.65 | 13.72 | 13.07 | 9.07 | 13.24 |
| 0.00 | 4.40 | 0.04 | 0.00 | 4.44 | | | | | |
| 0.59 | 5.36 | 2.52 | 1.53 | 10.00 | 0.33 | 5.95 | 5.62 | 2.76 | 5.41 |
| 1.18 | 7.76 | 0.24 | 0.18 | <u>9.36</u> | 0.23 | 7.22 | 6.99 | 0.28 | 4.08 |

³⁵ Magnesium: Guaranteed, 1.20%; found 1.43%.³⁶ Magnesium: Guaranteed, 1.20%; found 2.29%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|-------------|---|-------------------|
| 3513 | Lawn Master 5-10-5 Fertilizer | Middletown |
| 3514 | Lawn Master 10-6-4 Hi-Organic Fertilizer | Middletown |
| 3511 | New Garden Crest Lawn & Garden Fertilizer 5-10-5 | Middletown |
| | <u>O. M. SCOTT & SONS CO.</u> Marysville, Ohio | |
| 3591 | Dawn 16-11-13 | Greenwich |
| 3443 | Turf Builder 20-10-5 | Manchester |
| | <u>SEABOARD SEED CO.</u> Philadelphia, Pa. | |
| 3980 | Seaboard's Lawn & Plant Food 20-10-5 | North Haven |
| 3673 | Seaboard's Lawn Feeding Weed Killer 10-6-4 | Bridgeport |
| | <u>SEARS, ROEBUCK & CO.</u> Chicago, Ill. | |
| 4518 | Cross Country Crabgrass Plant Killer with Lawn Food | New London |
| 3555 | Cross Country Lawn Food 5-5-0 | Hamden |
| 3999 | Cross Country Lawn Food with Weed Killer 5-5-0 | Manchester |
| 4513 | Cross Country Lawn Quick Green 10-6-4 | Portland |
| 4530 | Cross Country Merion Bluegrass Lawn Food 20-10-5 | Portland |
| 3554 | Cross Country Plant Food 5-10-5 | Hamden |
| | <u>M. L. SHOEMAKER DIV.</u> Philadelphia, Pa. | |
| 4404 | M. L. Shoemaker's "Swift Sure" 4-10-0 | Windsorville |
| | <u>SWIFT & CO.</u> Baltimore, Md. | |
| 4002 | Golden Vigoro Lawn Food 12-5-7 | Manchester |
| 3548 | Pink Vigoro 8-12-6 | Hamden |
| 3444 | Vitogro 16-8-4 | Manchester |
| 3770 | Vitogro Lawn Weeder & Feeder 16-0-4 | Waterbury |

~~~~~ indicates deficiencies.

## CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen,<br>per cent |            |                   |                     |              | Phosphoric acid,<br>per cent |       |                          | Potash,<br>per cent |       |
|-----------------------|------------|-------------------|---------------------|--------------|------------------------------|-------|--------------------------|---------------------|-------|
| Nitrate               | Ammoniacal | Water-<br>soluble | Water-<br>insoluble | Total        | Citrate-<br>insoluble        | Total | So-called<br>"available" | As muriate          | Total |
| 1.44                  | 5.12       | 0.20              | 0.20                | 6.96         | 0.82                         | 10.37 | <u>9.55</u>              | 2.99                | 5.10  |
| 0.85                  | 4.32       | 2.24              | 2.03                | <u>9.44</u>  | 0.30                         | 5.57  | <u>5.27</u>              | 3.69                | 5.00  |
| 0.70                  | 5.20       | 0.48              | 0.44                | 6.82         | 0.50                         | 10.90 | 10.40                    | 1.47                | 5.00  |
| 0.36                  | 1.28       | 10.72             | 4.44                | 16.80        | 0.55                         | 11.40 | 10.85                    | 10.05               | 13.27 |
| 2.72                  | 1.06       | 7.86              | 8.36                | 20.00        | 0.30                         | 10.30 | 10.00                    | 2.26                | 5.54  |
| 0.97                  | 2.96       | 13.44             | 1.39                | <u>18.76</u> | 0.13                         | 10.80 | 10.67                    | 0.27                | 7.55  |
| 0.00                  | 4.60       | 4.73              | 1.55                | 10.88        | 0.17                         | 6.80  | 6.63                     | 2.53                | 4.94  |
| 0.26                  | 0.24       | 0.96              | 4.14                | 5.60         | 0.98                         | 6.15  | 5.17                     |                     |       |
| 0.20                  | 0.20       | 0.32              | 4.56                | 5.28         | 0.95                         | 6.00  | 5.05                     |                     |       |
| 0.00                  | 0.12       | 1.13              | 4.23                | 5.48         | 1.10                         | 6.40  | 5.30                     |                     |       |
| 0.60                  | 7.76       | 1.36              | 0.28                | 10.00        | 0.20                         | 7.10  | 6.90                     | 5.54                | 9.49  |
| 0.48                  | 4.64       | 12.00             | 3.24                | 20.36        | 0.45                         | 10.70 | 10.25                    | 1.87                | 5.10  |
| 1.09                  | 3.32       | 0.36              | 0.07                | <u>4.84</u>  | 0.47                         | 11.42 | 10.95                    | 2.64                | 5.31  |
| 0.92                  | 2.80       | 0.32              | 0.48                | 4.52         | 0.80                         | 11.87 | 11.07                    |                     |       |
| 1.16                  | 1.32       | 4.36              | 5.74                | 12.58        | 0.73                         | 5.85  | 5.12                     | 0.31                | 7.06  |
| 0.09                  | 5.92       | 2.04              | 0.31                | 8.36         | 0.50                         | 12.77 | 12.27                    | 5.17                | 6.14  |
| 0.33                  | 1.56       | 7.40              | 6.83                | 16.12        | 0.30                         | 8.60  | 8.30                     |                     | 4.62  |
| 0.50                  | 0.40       | 9.08              | 6.54                | 16.52        |                              |       |                          | 0.62                | 4.94  |

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Station No. | Manufacturer and brand                                                     | Place of sampling |
|-------------|----------------------------------------------------------------------------|-------------------|
|             | <u>UNEXCELLED CHEMICAL CORP.</u><br>Cranbury, N.J.                         |                   |
| 3678        | General Green 20-10-5 A Technical Formulation                              | Stratford         |
| 3658        | Lawn & Garden Food 5-10-5                                                  | Milford           |
| 3657        | Lawn & Garden Food Hi Organic 10-6-4                                       | Milford           |
| 3960        | Lawn Life 20-10-5                                                          | Darien            |
| 3676        | Lawn Master Fertilizer 10-6-4 100% Organic Nitrogen                        | Stratford         |
| 3613        | Princeton Park 5-10-5 Lawn & Garden Fertilizer                             | New Haven         |
|             | <u>UNIVERSAL CHEMICAL CO. INC.</u><br>West Lynn, Mass.                     |                   |
| 3941        | Electra Plant Food 5-10-3                                                  | Hartford          |
|             | <u>OSCAR F. WARNER</u><br>Waterbury, Conn.                                 |                   |
| 3786        | Warner's Grubedizer 8-6-4                                                  | Waterbury         |
| 3785        | Warner's Lawn Food 8-6-4                                                   | Waterbury         |
| 3784        | Warner's Tree Food 12-6-4                                                  | Waterbury         |
|             | <u>WHITNEY SEED CO. INC.</u><br>Buffalo, N.Y.                              |                   |
| 4048        | Whitney's Vital Brand Lawn Fertilizer 20-10-5                              | New Milford       |
|             | <u>GARFIELD WILLIAMSON, INC.</u><br>Jersey City, N.J.                      |                   |
| 4320        | Wonderlawn Lawn Food 10-6-4                                                | Bristol           |
| 3671        | Wonderlawn 10-6-4                                                          | Bridgeport        |
|             | <u>WIRTHMORE STORES INC.</u><br>Waltham, Mass.                             |                   |
| 4156        | Organo 10-5-5                                                              | Clinton           |
|             | <u>S.D. WOODRUFF &amp; SONS OF WETHERSFIELD INC.</u> , Wethersfield, Conn. |                   |
| 3979        | Woodruff's Tuf Turf Lawn 20-10-5                                           | North Haven       |
| 3618        | Woodruff's Tuf Turf Turf Food 10-6-4                                       | Wethersfield      |
| 3627        | Woodruff's Tuf Turf Two-for-One 10-6-4                                     | Wethersfield      |

~~~~~ indicates deficiencies.

CONTAINING NITROGEN, PHOSPHORIC ACID, AND POTASH

| Nitrogen, per cent | | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|-----------------------|------------|-------------------|---------------------|--------------|------------------------------|-------|--------------------------|---------------------|-------------|
| Nitrate | Ammoniacal | Water- soluble | Water- insoluble | Total | Citrate- insoluble | Total | So-called "available" | As muriate | Total |
| 2.60 | 5.48 | 6.56 | 6.36 | 20.00 | 0.05 | 11.50 | 11.45 | 3.53 | 5.66 |
| 1.02 | 2.88 | 1.20 | 0.14 | 5.24 | 0.52 | 11.25 | 10.73 | 3.82 | 5.77 |
| 1.65 | 4.68 | 3.04 | 1.37 | 10.74 | 0.47 | 8.12 | 7.65 | 2.74 | 4.00 |
| 1.63 | 4.56 | 6.32 | 4.53 | <u>17.04</u> | 0.33 | 10.52 | 10.19 | 6.41 | 8.78 |
| 0.55 | 0.64 | 3.04 | 6.39 | 10.62 | 0.15 | 6.35 | 6.20 | 4.62 | 4.75 |
| 1.27 | 3.76 | | 0.09 | 5.12 | 0.20 | 10.30 | 10.10 | 3.25 | 6.28 |
| 0.73 | 2.28 | 0.32 | 1.85 | 5.18 | 0.53 | 10.75 | 10.22 | 3.36 | 3.70 |
| 0.97 | 2.84 | 3.08 | 1.11 | 8.00 | 0.65 | 6.95 | 6.30 | 0.76 | 5.33 |
| 0.54 | 2.92 | 3.00 | 1.32 | <u>7.78</u> | 0.55 | 8.02 | 7.47 | 1.33 | 6.40 |
| 1.34 | 3.08 | 5.92 | 1.06 | <u>11.40</u> | 0.55 | 7.30 | 6.75 | 1.25 | 6.42 |
| 0.34 | 5.00 | 11.40 | 3.26 | 20.00 | 0.78 | 11.00 | 10.22 | 2.69 | 5.97 |
| 0.80 | 4.16 | 0.32 | 4.92 | 10.20 | 0.60 | 6.80 | 6.20 | 3.94 | 5.90 |
| 0.93 | 2.36 | 4.96 | 1.95 | 10.20 | 0.37 | 8.55 | 8.18 | 4.49 | 5.22 |
| 0.36 | 5.84 | 2.16 | 1.16 | <u>9.52</u> | 0.25 | 6.35 | 6.10 | 4.18 | 5.57 |
| 0.45 | 6.40 | 11.44 | 3.29 | 21.58 | 0.08 | 10.50 | 10.42 | 1.29 | <u>4.49</u> |
| 0.00 | 3.24 | 5.26 | 0.90 | <u>9.30</u> | 0.10 | 6.50 | 6.40 | 2.46 | <u>4.43</u> |
| 0.00 | 2.44 | 9.72 | 1.56 | 13.72 | 0.22 | 7.87 | 7.65 | 3.26 | 5.05 |

TABLE 6. ANALYSES OF SHEEP MANURE, ETC.

| Station No. | Manufacturer, brand and dealer |
|-------------|--|
| 4178 | Armour Cattle Manure. Armour Agricultural Chemical Co., Atlanta, Ga. Sampled at Young's Feed Store, Ridgefield. |
| 4179 | Armour Sheep Manure. Armour Agricultural Chemical Co., Atlanta, Ga. Sampled at Young's Feed Store, Ridgefield. |
| 3830 | Corenco Sheep Manure & Inert Matter. Consolidated Rendering Co., Boston, Mass. Sampled at Derby Feed Store, Derby. |
| 3610 | Davey Shredded Manure. The Davey Tree Expert Co., Kent, Ohio. Sampled at The Davey Tree Expert Co., Old Greenwich. |
| 4325 | H-H Cow Manure. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Bristol Nurseries Inc., Bristol. |
| 4516 | H-H Sheep Manure. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Hubbard-Hall Chemical Co., Portland. |
| 3952 | Lebanon Cow Manure. Lebanon Chemical Corp., Lebanon, Pa. Sampled at Leon Ezzell, Inc., Stamford. |
| 3942 | Dehydrated Sheep Manure. Maegeo Dehydrating Co., Lexington, N.C. Sampled at Cadwell & Jones Inc., Hartford. |
| 3448 | Fertal-Gro Dehydrated Cow Manure. Maegeo Dehydrating Co., Lexington, N.C. Sampled at Eastern States Farmers Exchange Inc., Buckland. |
| 3923 | Fertal-Gro Dehydrated Cow Manure. Maegeo Dehydrating Co., Lexington, N.C. Sampled at Vittner's Garden Center Inc., Manchester. |
| 3949 | McNair's Organure Dehydrated Cow Manure. McNairs Farms, Laurinburg, N.C. Sampled at The Peter Cascio Nursery, West Hartford. |

TABLE 6. ANALYSES OF SHEEP MANURE, ETC.

| Nitrogen, per cent | | Phosphoric acid, per cent | | | | Potash, per cent | | Sand, per cent |
|-----------------------|------------------|------------------------------|-------------|------------------|-----------------------------|---------------------|------------------|----------------|
| Total found | Total guaranteed | Citrate-insoluble | Total found | Total guaranteed | So-called "available" found | Total found | Total guaranteed | |
| 2.00 | 2.00 | | 1.22 | 1.00 | | 2.15 | 2.00 | 29.51 |
| 2.00 | 1.25 | | 1.30 | 1.00 | | 2.15 | 2.00 | 38.53 |
| 1.96 | 1.25 | | 2.00 | 1.00 | | 2.40 | 2.00 | 15.83 |
| 3.62 | 2.00 | | 4.40 | 1.00 | | 2.06 | 1.00 | 1.38 |
| 1.68 | 1.50 | 0.75 | 1.75 | | 1.00 ¹ | 2.75 | 1.00 | 22.58 |
| 1.44 | 1.25 | | 1.55 | 1.00 | | 2.53 | 1.00 | 25.41 |
| 2.08 | 2.00 | 0.40 | 1.40 | | 1.00 ¹ | 2.09 | 2.00 | 35.00 |
| 1.58 | 2.00 | 0.10 | 0.90 | | 0.80 ¹ | 7.17 | 5.00 | 8.44 |
| <u>1.30</u> | 2.00 | | 1.00 | 1.00 | | 7.06 | 7.00 | 23.68 |
| <u>1.76</u> | 2.00 | | 1.15 | | 1.15 ¹ | 8.93 | 7.00 | 7.99 |
| 2.32 | 2.00 | 0.10 | 1.45 | | 1.35 ¹ | 4.68 | 2.00 | 9.39 |

TABLE 6. ANALYSES OF SHEEP MANURE, ETC.

| Station No. | Manufacturer, brand and dealer |
|-------------|--|
| 3689 | Longhorn Brand Cattle Manure. Natural Plant Food Co., Oklahoma City, Okla. Sampled at Adams-Brainard, Inc., Thompsonville. |
| 3690 | Ramshorn Brand Sheep Manure. Natural Plant Food Co., Oklahoma City, Okla. Sampled at Adams-Brainard Inc., Thompsonville. |
| 4323 | Wizard Brand Cow Manure. St. Louis National Stockyards Co., National Stockyards, Ill. Sampled at Paul M. Hubbard & Co., Bristol. |
| 4517 | Cross Country Organic Cattle Manure Compost. Sears, Roebuck & Co., Chicago, Ill. Sampled at Sears, Roebuck & Co., New London. |
| 3553 | Cross Country Organic Sheep Manure Compost. Sears, Roebuck & Co., Chicago, Ill. Sampled at Sears, Roebuck & Co., Hamden. |
| 3619 | Bovung. Walker-Gordon Laboratory Co., Plainsboro, N.J. Sampled at The Charles C. Hart Seed Co., Wethersfield. |

~~~~~ indicates deficiencies.

<sup>1</sup> Guaranteed, 1.0%.

<sup>2</sup> Guaranteed, 0.50%.

TABLE 6. ANALYSES OF SHEEP MANURE, ETC.

| Nitrogen,<br>per cent |                  | Phosphoric acid,<br>per cent |             |                  |                             | Potash,<br>per cent |                  | Sand, per cent |
|-----------------------|------------------|------------------------------|-------------|------------------|-----------------------------|---------------------|------------------|----------------|
| Total found           | Total guaranteed | Citrate-insoluble            | Total found | Total guaranteed | So-called "available" found | Total found         | Total guaranteed |                |
| 2.00                  | 2.00             |                              | 1.12        | 1.00             |                             | <u>1.64</u>         | 2.00             | 26.47          |
| <u>1.46</u>           | 2.00             |                              | 1.02        | 1.00             |                             | <u>1.27</u>         | 2.00             | 37.98          |
| 2.00                  | 2.00             | 0.75                         | 2.47        |                  | 1.72 <sup>1</sup>           | 2.09                | 2.00             | 31.66          |
| 0.88                  | 0.50             | 0.05                         | 0.55        |                  | 0.50 <sup>2</sup>           | 0.67                | 0.50             | 44.52          |
| 0.82                  | 0.50             |                              | 0.55        | 0.50             |                             | 1.04                | 0.50             | 42.66          |
| 2.02                  | 2.00             | 0.10                         | 1.25        |                  | 1.15 <sup>1</sup>           | 2.65                | 2.00             | 1.50           |

TABLE 7. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No.       | Manufacturer and brand                                                   | Place of sampling |
|-------------------|--------------------------------------------------------------------------|-------------------|
|                   | <u>AGRICULTURAL PRODUCTS CO.</u><br>W. Kingston, R.I.                    |                   |
| 3582              | APCO All Purpose Plant Food 5-10-5                                       | Branford          |
| 4329              | APCO Rose Food 5-12-4                                                    | New Britain       |
|                   | <u>THE AMERICAN AGRICULTURAL</u><br><u>CHEMICAL CO., New York, N. Y.</u> |                   |
| 3578              | Agrico Fertilizer for Azaleas, Camellias, Rhododendrons 6-10-4           | Hamden            |
| 3904              | Agrico House Plant Food 17-17-17                                         | Buckland          |
| 3906              | Agrico Rose Fertilizer 5-9-6                                             | Buckland          |
|                   | <u>ATLAS FISH FERTILIZER CO.</u><br>San Francisco, Calif.                |                   |
| 3957              | Atlas Fish Emulsion Fertilizer 5-10-1                                    | Stamford          |
|                   | <u>JOSEPH BRECK &amp; SONS</u><br>Boston, Mass.                          |                   |
| 4322 <sup>1</sup> | Breck's Bone Meal 2.5-20-0                                               | Bristol           |
| 3924 <sup>2</sup> | Breck's Garden Gro 5-10-10-1.2                                           | Manchester        |
|                   | <u>CALIFORNIA SPRAY-CHEMICAL</u><br><u>CORP., Richmond, Calif.</u>       |                   |
| 4362              | Ortho-Gro Liquid Plant Food 15-5-5                                       | Fairfield         |
|                   | <u>CLINTON NURSERIES</u><br>Clinton, Conn.                               |                   |
| 3630              | New Era Rose Food 10-20-10                                               | Wethersfield      |
|                   | <u>CONSOLIDATED RENDERING CO.</u><br>Boston, Mass.                       |                   |
| 3977 <sup>3</sup> | Corenco Ground Bone 2-22-0                                               | North Haven       |
| 3901              | Corenco Home Garden Fertilizer<br>5-10-5                                 | Norwich           |
| 3635              | Corenco Rhododendron Azalea & Blueberry Special 7-7-7                    | Milford           |
| 4050              | Corenco Rose Special Fertilizer<br>5-10-5                                | Branford          |

~~~~~ indicates deficiencies.

¹ Mechanical Analysis: Fine, 69.0%; coarse, 31.0%.

TABLE 7. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Nitrogen, per cent | | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|-----------------------|------------|-------------------|---------------------|-------|------------------------------|-------|--------------------------|---------------------|-------|
| Nitrate | Ammoniacal | Water- soluble | Water- insoluble | Total | Citrate- insoluble | Total | So-called "available" | As muriate | Total |
| 0.00 | 5.04 | 0.26 | 0.26 | 5.56 | 0.17 | 9.50 | 9.33 | 4.25 | 5.16 |
| | 3.68 | 0.52 | 1.52 | 5.72 | 0.17 | 12.40 | 12.23 | 2.86 | 4.27 |
| 3.64 0.00 | 5.16 | 0.51 | 0.13 | 5.80 | 0.50 | 10.90 | 10.40 | 0.90 | 4.24 |
| | 3.92 | 10.00 | 0.00 | 17.56 | 0.05 | 19.35 | 19.30 | | 17.50 |
| | 2.96 | 2.56 | 0.24 | 5.76 | 0.13 | 10.02 | 9.89 | 0.20 | 5.96 |
| 0.26 | 1.32 | 3.64 | 0.72 | 5.94 | 0.05 | 1.08 | 1.03 | 1.77 | 1.77 |
| 1.50 | 3.68 | 0.00 | 0.00 | 2.84 | 0.65 | 26.10 | 10.10 | 4.81 | 10.04 |
| | | | | 5.18 | | 10.75 | | | |
| 0.28 | 0.56 | 14.32 | | 15.16 | | 5.17 | 5.17 | | 5.25 |
| 3.24 | 3.96 | 4.04 | 0.00 | 11.24 | 0.32 | 20.70 | 20.38 | | 10.66 |
| | | | | 2.44 | | 26.80 | | | |
| 1.27 | 3.92 | 0.32 | 0.49 | 6.00 | 0.17 | 10.00 | 9.83 | 4.86 | 6.59 |
| 1.93 | 4.76 | 0.20 | 0.17 | 7.06 | 0.22 | 7.42 | 7.20 | 4.79 | 7.50 |
| 0.00 | 2.20 | 1.56 | 1.24 | 5.00 | 0.80 | 11.75 | 10.95 | 5.72 | 6.32 |

² Magnesium: Guaranteed, 1.20%; found, 1.58%.³ Mechanical Analysis: Fine 65.0%; coarse, 35.0%.

TABLE 7. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|-------------------|--|-------------------|
| | <u>E. I. DuPONT De NEMOURS & CO. INC.</u> Wilmington, Del. | |
| 3510 | DuPont Azalea & Evergreen Food 10-5-5 | Middletown |
| 4537 | DuPont Rose Food 8-8-8 | Wallingford |
| | <u>EASTERN STATES FARMERS EX-CHANGE, INC.</u> W. Springfield, Conn. | |
| 3450 | Eastern States Start-N-Gro 16-32-16 | Buckland |
| | <u>THE ESPOMA CO.</u> Millville, N.J. | |
| 4054 | Espoma Rose Food 6-6-4 | Branford |
| | <u>FIRST NATIONAL STORE S, INC.</u> East Hartford, Conn. | |
| 3978 | Emerald Green Evergreen Food 4-10-4 | North Haven |
| 4055 | Emerald Green Plant Food 8-12-6 | Guilford |
| 3664 | Emerald Green Rose Food 7-10-5 | Milford |
| | <u>GEIGY AGRICULTURAL CHEMICALS</u> Ardsley, N.Y. | |
| 3956 ⁴ | Sequestrene 330 Fe Iron Chelate | Stamford |
| | <u>GOULARD & OLENA, INC.</u> Skillman, N.J. | |
| 4541 | G&O Evergreen Food 5-10-10 | West Hartford |
| 3905 | G&O Plant Food for Acid-Loving Plants 6-10-4 | Buckland |
| 4543 | G&O Prizegro for Gardens 5-10-5 | West Hartford |
| 3925 | G&O Tomato & Fruit Food 5-10-10 | Manchester |
| 4164 | G&O Tomato Food 3-12-13 | New Canaan |
| | <u>GRAY CHEMICALS, INC.</u> Gloucester, Mass. | |
| 4547 | Mer-Made Plant Food 5-5-1 | West Hartford |
| | <u>THE CHARLES C. HART SEED CO.</u> Wethersfield, Conn. | |
| 4546 | Hart's Plant Food 5-10-5 for Vegetables & Flower Gardens | West Hartford |
| 3811 | Hart's Rose Food 7-7-7 | Plainville |

~~~~~ indicates deficiencies.

TABLE 7. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Nitrogen,<br>per cent |            |                   |                     |             | Phosphoric acid,<br>per cent |       |                          | Potash,<br>per cent |                   |
|-----------------------|------------|-------------------|---------------------|-------------|------------------------------|-------|--------------------------|---------------------|-------------------|
| Nitrate               | Ammoniacal | Water-<br>soluble | Water-<br>insoluble | Total       | Citrate-<br>insoluble        | Total | So-called<br>"available" | As muriate          | Total             |
| 0.46                  | 1.56       | 1.64              | 6.90                | 10.56       | 0.22                         | 6.87  | 6.65                     | 4.78                | 5.19              |
| 0.40                  | 0.00       | 1.76              | 5.84                | 8.00        | 1.15                         | 9.52  | 8.37                     | 9.22                | 10.08             |
| 5.18                  | 7.84       | 3.32              | 0.00                | 16.34       | 0.00                         | 32.10 | 32.10                    |                     | 16.91             |
| 0.00                  | 4.24       | 0.72              | 2.12                | 7.08        | 0.32                         | 6.50  | 6.18                     | 2.70                | 4.33              |
| 0.00                  | 0.24       | 3.10              | 1.18                | 4.52        | 0.48                         | 11.20 | 10.72                    | 3.94                | 4.49              |
| 1.24                  | 5.52       | 0.56              | 0.74                | 8.06        | 1.05                         | 12.65 | 11.60                    | 4.83                | 6.07              |
| 0.19                  | 3.56       | 1.72              | 1.57                | 7.04        | 0.20                         | 8.50  | <u>8.30</u>              | 0.24                | <u>4.39</u>       |
| 0.86                  | 2.48       | 1.44              | 0.46                | 5.24        | 0.40                         | 10.55 | 10.15                    | 5.44                | 10.04             |
| 0.68                  | 4.88       | 0.32              | 0.26                | 6.14        | 0.30                         | 10.65 | 10.35                    | 2.95                | 4.49              |
| 0.48                  | 2.64       | 0.92              | 1.16                | 5.20        | 0.40                         | 10.50 | 10.10                    | 3.98                | 5.57 <sup>4</sup> |
| 1.30                  | 3.72       | 0.16              | 0.12                | 5.30        | 0.50                         | 10.72 | 10.22                    | 5.90                | 10.01             |
|                       |            |                   |                     | 3.24        | 0.45                         | 13.95 | 13.50                    | 9.34                | 14.53             |
| 0.22                  | 0.48       | 3.64              | 1.06                | 5.40        |                              | 5.00  | 5.00                     | 1.67                | 1.67              |
| 1.36                  | 4.32       | 0.68              |                     | 6.36        | 0.30                         | 10.90 | 10.60                    | 2.54                | 5.66              |
| 0.78                  | 3.82       | 0.02              | 1.24                | <u>5.86</u> | 0.45                         | 10.30 | 9.85                     | 3.93                | <u>6.69</u>       |

<sup>4</sup> Iron: Guaranteed, 10.00%; found, 7.79%.

TABLE 7. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No.                                            | Manufacturer and brand                                                                                                          | Place of sampling                  |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
|                                                        | <u>A. H. HOFFMAN, INC.</u><br>Landisville, Pa.                                                                                  |                                    |
| 4053 <sup>5</sup><br>3681                              | Hoffman Dehydrated Cow Manure 2-1-1<br>Hoffman Rose Food 5-10-5                                                                 | Branford<br>Thompsonville          |
|                                                        | <u>THE HUBBARD-HALL CHEMICAL</u><br>CO., Waterbury, Conn.                                                                       |                                    |
| 4321<br>3518 <sup>6</sup><br>4326<br>3660 <sup>7</sup> | Gro-Fast Evergreen Food 4-10-4<br>H-H Bone Meal 2-23-0<br>H-H Cottonseed Meal 6-0-0<br>H-H Cow Manure & Inert Matter<br>1.5-1-1 | Bristol<br>Hamden<br>Bristol       |
| 4181<br>3680<br>3659 <sup>8</sup>                      | H-H Muriate of Potash 60%<br>H-H Rose Food 7-10-5<br>H-H Sheep Manure & Inert Matter<br>1.25-1-1                                | Milford<br>Ridgefield<br>Stratford |
|                                                        | <u>HYDROPONIC CHEMICAL CO., INC.</u><br>Copley, Ohio                                                                            |                                    |
| 3594                                                   | Hyponex Plant Food 7-6-19                                                                                                       | Greenwich                          |
|                                                        | <u>THE HY-TROUS CORP.</u><br>Boston, Mass.                                                                                      |                                    |
| 3446                                                   | Hy-Trous Liquid Fertilizer 4-8-4                                                                                                | Manchester                         |
|                                                        | <u>OLIN MATHIESON CHEMICAL CORP.</u><br>New York, N. Y.                                                                         |                                    |
| 3557                                                   | Plantrons 12-24-12                                                                                                              | Hamden                             |
|                                                        | <u>ORGANIC COMPOST CORP.</u><br>Oxford, Pa.                                                                                     |                                    |
| 3581 <sup>9</sup>                                      | Fertilife Cattle Manure 0.5-0.5-0.5-                                                                                            | Branford                           |

~~~~~ indicates deficiencies.

⁵ Sand: 10.31%.

⁶ Mechanical analysis: Fine, 51.0%; coarse, 49.0%.

TABLE 7. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Nitrogen, per cent | | | | Phosphoric acid, per cent | | | Potash, per cent | | |
|-----------------------|------------|-------------------|---------------------|------------------------------|-----------------------|----------------------|--------------------------|------------|-------------------------------|
| Nitrate | Ammoniacal | Water- soluble | Water- insoluble | Total | Citrate- insoluble | Total | So-called "available" | As muriate | Total |
| 0.00 | 3.60 | 0.27 | 1.45 | 2.08 5.32 | 0.35 0.17 | 1.60 10.85 | 1.25 10.68 | 3.53 | 4.21 6.14 |
| 0.24 | 1.68 | 1.28 | 0.98 | 4.18 2.58 6.12 | 0.70 | 12.22 27.40 | 11.52 | 2.99 | 4.02 |
| 0.00 | 3.60 | 3.20 | 1.26 | 1.50 8.06 1.48 | 0.12 | 1.80 9.65 1.57 | <u>9.53</u> | | 2.49 60.96 6.17 2.75 |
| 6.36 | 1.16 | 0.04 | | 7.56 | 0.10 | 7.40 | 7.30 | | 21.28 |
| 1.44 | 1.92 | 1.08 | 0.00 | 4.44 | 0.00 | 8.33 | 8.33 | | 6.93 |
| 0.00 | 11.36 | 0.72 | 0.16 | 12.24 | 0.28 | 25.40 | 25.12 | 8.39 | 12.08 |
| | | | | 0.86 | 0.22 | 0.80 | 0.58 | | 0.67 |

⁷ Sand: 31.44%.

⁸ Sand: 30.09%.

⁹ Sand: 43.18%.

TABLE 7. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No. | Manufacturer and brand | Place of sampling |
|-------------|---|-------------------|
| | <u>PARKS-BARNES, INC.</u> Hermosa Beach, Calif. | |
| 3612 | Black Magic African Violet Blossom Booster 4-10-10 | Old Greenwich |
| 3447 | Black Magic Liquid Fertilizer 10-5-5 | Manchester |
| 3611 | Black Magic 2-3-2 Plant Food | Old Greenwich |
| | <u>PLANTABBS CORP.</u> Baltimore, Md. | |
| 3972 | Plantabbs 11-15-20 | Darien |
| | <u>PLANT SHINE CO.</u> St. Louis, Mo. | |
| 3636 | "Schultz-Instant" Liquid Plant Food 10-15-10 | Milford |
| | <u>RA-PID-GRO CORP.</u> Dansville, N.Y. | |
| 3519 | Ra-Pid-Gro 23-21-17 | Hamden |
| | <u>ROSS DANIELS, INC.</u> Des Moines, Iowa | |
| 3958 | Ross Plant Food Cartridges 15-25-10 | Stamford |
| | <u>O.M. SCOTT & SONS</u> Marysville, Ohio | |
| 3552 | Dawn 16-11-13 | New Haven |
| | <u>SEARS, ROEBUCK & CO.</u> Chicago, Ill. | |
| 4520 | Cross Country Bulk Food 4-12-8 | New London |
| 4001 | Cross Country Evergreen Food 10-6-4 | Manchester |
| 4519 | Cross Country Plant Food 5-10-5 | New London |
| 3959 | Cross Country Rose Food 5-10-5 | Stamford |
| | <u>STERN'S NURSERIES, INC.</u> Geneva, N.Y. | |
| 4380 | Miracle-Gro 15-30-15 | Fairfield |
| 3593 | Stern's Miracid 30-10-10 | Greenwich |

~~~~~ indicates deficiencies.

TABLE 7. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Nitrogen,<br>per cent |            |                   |                     |              | Phosphoric acid,<br>per cent |       |                          | Potash,<br>per cent |              |
|-----------------------|------------|-------------------|---------------------|--------------|------------------------------|-------|--------------------------|---------------------|--------------|
| Nitrate               | Ammoniacal | Water-<br>soluble | Water-<br>insoluble | Total        | Citrate-<br>insoluble        | Total | So-called<br>"available" | As muriate          | Total        |
|                       |            |                   |                     | 4.52         | 0.00                         | 10.60 | 10.60                    |                     | 10.04        |
| 0.42                  | 0.56       | 9.96              | 0.00                | 10.94        | 0.05                         | 5.92  | 5.87                     |                     | 5.13         |
|                       |            |                   |                     | 2.58         | 0.25                         | 3.65  | 3.40                     | 0.17                | 3.35         |
| 7.84                  | 3.44       | 0.16              | 0.00                | 11.44        | 0.05                         | 18.45 | 18.40                    |                     | 25.25        |
| 0.64                  | 1.42       | 8.74              | 0.00                | 10.80        | 0.05                         | 14.00 | <u>13.95</u>             |                     | <u>8.93</u>  |
| 5.26                  | 3.72       | 15.00             |                     | 23.98        | 0.00                         | 18.90 | <u>18.90</u>             |                     | 17.96        |
| 0.00                  | 5.20       | 10.14             | 0.00                | 15.34        | 0.05                         | 27.55 | 27.50                    |                     | 10.70        |
| 0.06                  | 1.36       | 11.24             | 4.84                | 17.50        | 1.10                         | 12.60 | 11.50                    | 5.07                | <u>10.59</u> |
| 0.66                  | 2.72       | 0.40              | 0.82                | 4.60         | 0.80                         | 12.50 | <u>11.70</u>             | 5.48                | <u>6.93</u>  |
| 0.00                  | 5.08       | 3.57              | 1.43                | 10.08        | 0.55                         | 7.55  | 7.00                     | 3.88                | 4.36         |
| 0.20                  | 5.68       |                   | 0.08                | 5.96         | 0.10                         | 10.50 | 10.40                    | 3.94                | 5.38         |
| 0.00                  | 5.68       | 0.58              | 0.00                | 6.26         | 0.38                         | 16.17 | 15.79                    | 11.47               | 12.58        |
| 0.00                  | 7.12       | 8.16              | 0.08                | 15.36        | 0.05                         | 30.80 | 30.75                    | 0.17                | 15.11        |
| 0.00                  | 2.80       | 25.16             |                     | <u>27.96</u> | 0.00                         | 8.32  | <u>8.32</u>              | 10.96               | 16.03        |

TABLE 7. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Station No.        | Manufacturer and brand                                    | Place of sampling |
|--------------------|-----------------------------------------------------------|-------------------|
|                    | <u>STIM-U-PLANT LABORATORIES, INC.</u><br>Columbus, Ohio  |                   |
| 3445               | Stim-U-Plant 5-8-7 African Violet Food                    | Manchester        |
| 4154               | Stim-U-Plant All Purpose Plant Food 5-8-7                 | Guilford          |
| 4155               | Stim-U-Plant All Purpose Plant Food 11-12-15              | Guilford          |
|                    | <u>SWIFT &amp; CO.</u><br>Chicago, Ill.                   |                   |
| 3556               | Pink Vigoro 8-12-6                                        | Hamden            |
| 3512               | Vigoro Complete Plant Food 6-10-4                         | Middletown        |
|                    | <u>SWISS FARMS</u><br>Philmont, N. Y.                     |                   |
| 3637               | Plantdrops Instant Liquid Plant Food 6-18-6               | Milford           |
|                    | <u>UNION WADDING CO.</u><br>Pawtucket, R. I.              |                   |
| 3573               | Jiffy Planter 19-28-14                                    | Hamden            |
|                    | <u>WALKER-GORDON LABORATORY</u><br>CO., Plainsboro, N. J. |                   |
| 3828 <sup>10</sup> | Bovung 2-1-2                                              | Plainville        |
|                    | <u>THE WILBUR-ELLIS CO.</u><br>New York, N. Y.            |                   |
| 4549               | Wil-Gro Organic Nitrogen Fertilizer 10-5-5                | W. Hartford       |

~~~~~ indicates deficiencies.

TABLE 7. ANALYSES OF SMALL PACKAGE FERTILIZERS

| Nitrogen, per cent | | | | | Phosphoric acid, per cent | | | Potash, per cent | |
|-----------------------|------------|-------------------|---------------------|--------------|------------------------------|-------|--------------------------|---------------------|-------|
| Nitrate | Ammoniacal | Water- soluble | Water- insoluble | Total | Citrate- insoluble | Total | So-called "available" | As Muriate | Total |
| 2.97 | 3.92 | 0.00 | 0.11 | 7.00 | 0.05 | 11.10 | 11.05 | | 8.93 |
| 2.72 | 2.08 | 0.00 | 0.00 | <u>4.80</u> | 0.00 | 8.00 | 8.00 | 4.48 | 7.61 |
| 0.00 | 5.24 | 6.00 | 0.00 | 11.24 | 0.40 | 15.75 | 15.35 | | 16.73 |
| 0.08 | 6.32 | 2.28 | 0.12 | 8.80 | 0.77 | 14.70 | 13.93 | 0.38 | 7.81 |
| 0.36 | 4.96 | 0.28 | 0.46 | 6.06 | 0.60 | 11.35 | 10.75 | 3.32 | 4.21 |
| 0.00 | 5.60 | 0.26 | 0.00 | <u>5.86</u> | 0.00 | 17.50 | <u>17.50</u> | 3.67 | 5.93 |
| 4.20 | 5.68 | 8.72 | | <u>18.60</u> | 0.00 | 28.85 | 28.85 | | 14.14 |
| | | | | <u>1.80</u> | 0.23 | 1.57 | 1.34 | | 2.00 |
| 0.24 | 2.16 | 7.64 | | 10.04 | | 5.60 | 5.60 | 0.29 | 6.14 |

¹⁰ Sand: 1.16%.

TABLE 8. ANALYSES OF OTHER MISCELLANEOUS MATERIALS

(Figures are in per cent)

| Station No. | Material | Total nitrogen | Total phosphoric acid | Citrate-insoluble phosphoric acid | "Available" phosphoric acid | Water-soluble potash | Chlorine | Water | Calcium oxide | Magnesium oxide | Sand |
|-------------|------------------------------------|----------------|-----------------------|-----------------------------------|-----------------------------|----------------------|----------|-------|--------------------|--------------------|-------|
| 3747 | Chicken Manure | 3.18 | 4.63 | | | 3.76 | | | | | 5.60 |
| 2614 | Corn Cob ¹ | | | | | | | | | | |
| 2615 | Fertilizer | 3.16 | 3.30 | | | 1.64 | | | | | 43.66 |
| 3763 | Fertilizer | 0.76 | 0.65 | | | 0.98 | | | 30.10 | 24.32 | |
| 3475 | Ground Limestone | | | | | | | | | | |
| 3964 | Horn Shavings | 12.16 | 0.20 | 0.08 | 0.12 | 0.00 | 0.00 | | | | |
| 4107 | "Ko-K-O Mulch" | 2.56 | 1.05 | 0.30 | 0.75 | 3.41 | 0.00 | | | | |
| 4148 | Magnesian Limestone ² | | | | | | | | | | |
| 3199 | Manure | 0.16 | 0.02 | | | 0.02 | | 76.09 | | | 4.32 |
| 3685 | "Nelco Agricultural Hydrated Lime" | | | | | | | | 41.27 ³ | 28.89 ⁴ | |
| 4237 | Organic fertilizer | 2.02 | 1.63 | 0.25 | 1.38 | 0.41 | | | | | |
| 4211 | Pulverized Chicken Manure | 1.76 | 8.46 | | | 1.57 | | 37.07 | | | 3.86 |
| 3051 | "3-17 Mix Tobacco" | 2.46 | 0.35 | | | 4.46 | | | | | |
| 3232 | Unknown fertilizer | 0.86 | 0.25 | | | | 0.00 | | | | |
| 3278 | Unknown fertilizer | 2.16 | 30.15 | | | | | 5.71 | | | |

~~~~ indicates deficiencies

<sup>1</sup> Mineral oil 0.08 per cent<sup>3</sup> Guaranteed 47.<sup>2</sup> Qualitative analysis only<sup>4</sup> Guaranteed 31.



## INDEX

|                                                                           | Page                              |
|---------------------------------------------------------------------------|-----------------------------------|
| Agricultural Products Co., Providence, R.I. ....                          | 4                                 |
| Agricultural Products Co., West Kingston, R.I. ....                       | 44                                |
| Agricultural Supply Co., West Haven, Conn. ....                           | 4, 44                             |
| "Agrinite" .....                                                          | 34                                |
| Allied Chemical Corp., Nitrogen Div., Hopewell, Va. .                     | 5, 29, 30                         |
| American Agricultural Chemical Co., New York, N.Y. .                      | 34, 36, 76                        |
| American Agricultural Chemical Co., North Weymouth, Mass. .               | 5, 38, 44                         |
| Ammonium nitrate .....                                                    | 29                                |
| A-Penn Oil Co., Butler, Pa. ....                                          | 4, 44                             |
| Approved grades .....                                                     | 23                                |
| Archer-Daniels-Midland Co., Minneapolis, Minn. ....                       | 6                                 |
| Armour Agricultural Chemical Co., Carteret, N.J. ....                     | 6, 46, 72                         |
| Asgrow Seed Co., New Haven, Conn. ....                                    | 7, 34, 48                         |
| Atkins & Durbrow, Inc., Port Colborne, Ont., Canada .....                 | 7                                 |
| Atlas Fish Fertilizer Co., San Francisco, Calif. ....                     | 76                                |
| Baker Castor Oil Co., Bayonne, N.J. ....                                  | 31                                |
| Bartlett Tree Expert Co., F. A., Stamford, Conn. ....                     | 7, 48                             |
| Bennett & Clayton Div., Unexcelled Chemical Corp.,<br>Cranbury, N.J. .... | 21, 48                            |
| Blackstone Guano Co., Inc., Baltimore, Md. ....                           | 7                                 |
| Blood, dried .....                                                        | 35                                |
| Bone meal .....                                                           | 26, 43, 76                        |
| Bone, precipitated .....                                                  | 26, 37                            |
| Bonnie Green Products Co., Philadelphia, Pa. ....                         | 7                                 |
| Booher Lumber Co., Inc., Nedrow, N.Y. ....                                | 7, 48                             |
| Borden Co., The, Cleveland Div., New York, N.Y. ....                      | 7, 35                             |
| "Borden 38" .....                                                         | 26, 35                            |
| "Bovung" .....                                                            | 74                                |
| Breck, Joseph, & Sons, Boston, Mass. ....                                 | 7, 48, 76                         |
| Brode Corp., The Memphis, Tenn. ....                                      | 8, 31                             |
| Brookside Nurseries, Inc., Darien, Conn. ....                             | 8, 35, 48                         |
| Burpee, W. Atlee, Philadelphia, Pa. ....                                  | 8, 50                             |
| Cadwell & Jones, Inc., Hartford, Conn. ....                               | 8, 50                             |
| California Chemical Co., Ortho Div., Richmond, Calif. .                   | 8, 76                             |
| Carbochimique, Belgium .....                                              | 30                                |
| Carbola Chemical Co., Inc., Natural Bridge, N.Y. ....                     | 8                                 |
| Cascio, Peter, Nursery, Inc., West Hartford, Conn. ....                   | 8, 50                             |
| Castor pomace .....                                                       | 31                                |
| Cattle manure .....                                                       | 27, 72, 80, 86                    |
| Check meals and fertilizers .....                                         | 28                                |
| Chicken manure .....                                                      | 86                                |
| Chilean Nitrate Sales Corp., New York, N.Y. ....                          | 8, 29, 39                         |
| Classification of fertilizer materials .....                              | 24                                |
| Cloro-Spray Corp., Philadelphia, Pa. ....                                 | 9                                 |
| Clinton Nurseries, Clinton, Conn. ....                                    | 76                                |
| Cocke & Co., Atlanta, Ga. ....                                            | 9, 31                             |
| Consolidated Rendering Co., Boston, Mass. . .                             | 9, 31, 36, 37, 39, 43, 50, 72, 76 |
| Corn cob .....                                                            | 86                                |
| Cotton hull ashes .....                                                   | 26, 40                            |
| Cottonseed meal .....                                                     | 26, 31                            |
| Cyanamid .....                                                            | 29                                |

|                                                                                                                | Pages                                 |
|----------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Davey Tree Expert Co., The, Kent, Ohio .....                                                                   | 10, 52, 72                            |
| Davison Chemical Co. Div., W. R. Grace & Co.,<br>Baltimore, Md. ....                                           | 10, 37, 54                            |
| Dayton Fertilizer Corp., Dayton, N.J. ....                                                                     | 10, 54                                |
| Definitions, official .....                                                                                    | 4                                     |
| Dicalcium phosphate .....                                                                                      | 26, 38                                |
| Doughten Seed Co., The, Jersey City, N.J. ....                                                                 | 10                                    |
| du Pont de Nemours & Co., E. I., Wilmington, Del. ....                                                         | 10, 30, 54, 78                        |
| Eastern States Farmers' Exchange, Inc., West Springfield,<br>Mass. ....                                        | 10, 37, 54, 78                        |
| Eastman Gelatine Corp., Peabody, Mass. ....                                                                    | 11, 38                                |
| Edgewood Farms, Inc., Marysville, Ohio .....                                                                   | 11                                    |
| Ellar Chemical Distributors, Inc., Lodi, N.J. ....                                                             | 11, 56                                |
| Eshelman, John W., & Sons, Lancaster, Pa. ....                                                                 | 11, 32                                |
| Espoma Co., The, Millville, N.J. ....                                                                          | 11, 56, 78                            |
| Faesly & Besthoff, Inc., New York, N.Y. ....                                                                   | 11, 32, 43, 56                        |
| Farmingdale Garden Laboratories, Inc., Farmingdale,<br>N.Y. ....                                               | 11, 56                                |
| Fertilizers, mixed .....                                                                                       | 26, 44                                |
| First National Stores, Inc., East Hartford, Conn. ....                                                         | 56, 78                                |
| Fish, dry ground .....                                                                                         | 26, 42                                |
| Gansco Products, Ltd., Toronto, Ont., Canada .....                                                             | 12                                    |
| Garden Center, The, Inc., West Hartford, Conn. ....                                                            | 12, 35, 56                            |
| Geigy Agricultural Chemicals, Ardsley, N.Y. ....                                                               | 12, 78                                |
| Glen Terrace Nurseries, Inc., Hamden, Conn. ....                                                               | 12, 58                                |
| G. L. F. Soil Building Service Div., Cooperative Grange League<br>Federation Exchange, Inc., Ithaca, N.Y. .... | 12                                    |
| Godfrey's Garden Shop, Fairfield, Conn. ....                                                                   | 12, 58                                |
| Goldenrod Oil Meal Sales Co., Memphis, Tenn. ....                                                              | 12, 32                                |
| Goulard & Olena, Inc., Skillman, N.J. ....                                                                     | 12, 32, 58, 78                        |
| Grace Chemical Div., W. R. Grace & Co., Memphis, Tenn. ....                                                    | 12                                    |
| Grades, approved .....                                                                                         | 23                                    |
| Gray Chemicals, Inc., Gloucester, Mass. ....                                                                   | 12, 78                                |
| Green-D Products, Inc., Huntington Station, N.Y. ....                                                          | 12, 58                                |
| Guaranties, maintenance of .....                                                                               | 28                                    |
| Halstead Distributing Co., Mt. Kisco, N.Y. ....                                                                | 12, 58                                |
| Hart Seed Co., The Charles C., Wethersfield, Conn. ....                                                        | 13, 60, 78                            |
| Haynie Products, Inc., Baltimore, Md. ....                                                                     | 14                                    |
| Hercules Powder Co., Wilmington, Del. ....                                                                     | 14                                    |
| Hershey Estates, Hershey, Pa. ....                                                                             | 14, 60                                |
| Hoffman, A. H., Inc., Landisville, Pa. ....                                                                    | 14, 80                                |
| Home mixes .....                                                                                               | 27                                    |
| Hormel, George A., & Co., Austin, Minn. ....                                                                   | 4                                     |
| Horn shavings .....                                                                                            | 86                                    |
| Hubbard-Hall Chemical Co., The, Waterbury, Conn. ....                                                          | 15, 37, 39,<br>40, 42, 43, 60, 72, 80 |
| Humphreys-Godwin Co., Memphis, Tenn. ....                                                                      | 15, 32                                |
| Hydroponic Chemical Co., Inc., Copley, Ohio .....                                                              | 80                                    |
| Hy-Trous Corp., The, Boston, Mass. ....                                                                        | 80                                    |
| Inspection, report on .....                                                                                    | 23                                    |
| International Minerals & Chemical Corp., Woburn, Mass. ....                                                    | 15, 39                                |
| Kellogg, Spencer, & Sons, Inc., Buffalo, N.Y. ....                                                             | 16, 34                                |
| Ken-Bris Farm, Inc., Philadelphia, Pa. ....                                                                    | 16, 62                                |

|                                                              | Pages          |
|--------------------------------------------------------------|----------------|
| Law and regulations .....                                    | 3              |
| Lawn & Grass Seeds, Inc., Buffalo, N.Y. ....                 | 16, 62         |
| Lawn-Tex, Inc., Chicago, Ill. ....                           | 62             |
| Lebanon Chemical Corp., Lebanon, Pa. ....                    | 16, 43, 62, 72 |
| Lee-Patten Seed Co., Jersey City, N.J. ....                  | 16, 64         |
| Libner Grain Co., The, Norwalk, Conn. ....                   | 16, 43         |
| Liming materials .....                                       | 27, 86         |
| Linseed oil meal .....                                       | 34             |
| Lofts Pedigreed Seed Co., Jersey City, N.J. ....             | 16             |
| Lovitt, L. B., & Co., Memphis, Tenn. ....                    | 17, 32, 33     |
| Maegeo Farms, Lexington, N.C. ....                           | 17, 72         |
| Maintenance of guaranties .....                              | 28             |
| Mamlon Co., The, New Haven, Conn. ....                       | 17, 64         |
| Manure, chicken .....                                        | 86             |
| Manure, sheep and cattle. ....                               | 27, 72, 80, 86 |
| Massachusetts Nurserymen's Association, Boston, Mass. ....   | 17, 64         |
| McArdle's Seed Co., Greenwich, Conn. ....                    | 17, 64         |
| McNair's Farms, Laurinburg, N.C. ....                        | 17, 72         |
| "Milorganite" .....                                          | 26, 43         |
| Miscellaneous fertilizers .....                              | 28, 86         |
| Mississippi Oil Mills, Inc., Greenville, Miss. ....          | 33             |
| Mixed fertilizers .....                                      | 26, 44         |
| Monsanto Chemical Co., St. Louis, Mo. ....                   | 17             |
| Muriate of potash .....                                      | 26, 39         |
| Natural Plant Food Co., Oklahoma City, Okla. ....            | 17, 74         |
| Nitrate of ammonia .....                                     | 29             |
| Nitrate of potash .....                                      | 26, 39         |
| Nitrate of soda .....                                        | 29             |
| Nitrate of soda-potash .....                                 | 26, 39         |
| Nitrogen-and-phosphoric-acid-containing materials ..         | 26, 42         |
| Nitrogenous materials .....                                  | 26, 29         |
| Nu Life Products Co., South Windsor, Conn. ....              | 17             |
| Old Fox Agricultural Sales, Inc., East Providence, R.I. .... | 17, 35         |
|                                                              | 37, 39, 64     |
| Olin-Mathieson Chemical Corp., Baltimore, Md. ....           | 18, 37         |
| Olin-Mathieson Chemical Corp., Houston, Texas ....           | 66             |
| Olin-Mathieson Chemical Corp., Little Rock, Ark. ....        | 30             |
| Olin-Mathieson Chemical Corp., New York, N.Y. ....           | 80             |
| Organic Compost Corp., Oxford, Pa. ....                      | 80             |
| "Organo" .....                                               | 26, 35         |
| Parks-Barnes, Inc., Hermosa Beach, Calif. ....               | 82             |
| Pax Co., Salt Lake City, Utah .....                          | 18, 66         |
| Peters Co., Robert B., Allentown, Pa. ....                   | 18             |
| Phosphate rock .....                                         | 26, 38         |
| Phosphoric-acid-containing materials .....                   | 26, 36         |
| Plantabbs Corp., Baltimore, Md. ....                         | 82             |
| Plant Shine Co., St. Louis, Mo. ....                         | 82             |
| Platt Co., Frank S., Branford, Conn. ....                    | 18, 66         |
| Potash-magnesia, sulphate of .....                           | 26, 39         |
| Potash salts .....                                           | 26, 39         |
| Potassium chloride .....                                     | 26, 39         |
| Potassium nitrate .....                                      | 26, 39         |
| Potassium sulphate .....                                     | 26, 39         |
| Precipitated bone .....                                      | 26, 37         |



|                                                                                              | Pages              |
|----------------------------------------------------------------------------------------------|--------------------|
| Pride of the Valley Mills, Vernon, N.J. ....                                                 | 18                 |
| Prospect Mfg. Co., Cranbury, N.J. ....                                                       | 18, 66             |
| "Purge" .....                                                                                | 34                 |
| Ra-Pid-Gro Corp., Dansville, N.Y. ....                                                       | 19, 82             |
| Registrations, list of .....                                                                 | 4                  |
| Regulations .....                                                                            | 3                  |
| Riverside Oil Mill, Marks, Miss. ....                                                        | 33                 |
| Ross-Daniels, Inc., Des Moines, Iowa .....                                                   | 82                 |
| St. Louis National Stockyards Co., National Stock Yards, Ill. ....                           | 19, 74             |
| Scott, O.M., & Sons Co., Marysville, Ohio ..                                                 | 19, 35, 68, 82     |
| Seaboard Seed Co., Philadelphia, Pa. ....                                                    | 18, 68             |
| Sears, Roebuck & Co., Chicago, Ill. ....                                                     | 17, 43, 68, 74, 82 |
| Sewerage Commission of the City of Milwaukee, Milwaukee,<br>Wis. ....                        | 19, 43             |
| Sheep manure .....                                                                           | 27, 72             |
| Sherwin-Williams Co., The, Cleveland, Ohio .....                                             | 20, 34             |
| Shoemaker, M.L., Div., Wilson & Co., Philadelphia, Pa. ....                                  | 20, 68             |
| Small package fertilizers .....                                                              | 27, 76             |
| Sodium nitrate .....                                                                         | 29                 |
| Soybean oil meal .....                                                                       | 34                 |
| Southern Cotton Oil Co., The, Div., Hunt Foods & Industries,<br>Inc., Greenville, Miss. .... | 20                 |
| Special and home mixtures .....                                                              | 27                 |
| Staley Mfg. Co., A. E., Decatur, Ill. ....                                                   | 20, 34             |
| State purchases .....                                                                        | 27                 |
| Stern's Nurseries, Inc., Geneva, N.Y. ....                                                   | 20, 82             |
| Stim-U-Plant Laboratories, Inc., Columbus, Ohio ...                                          | 20, 84             |
| Sulphate of potash .....                                                                     | 26, 39             |
| Sulphate of potash-magnesia .....                                                            | 26, 39             |
| Superphosphate .....                                                                         | 26, 36             |
| Swift & Co., Chicago, Ill. ....                                                              | 84                 |
| Swift & Co., Agricultural Chemical Div., Baltimore, Md. ....                                 | 20, 68             |
| Swiss Farms, Philmont, N.Y. ....                                                             | 20, 84             |
| Teweles Seed Co., L., Milwaukee, Wis. ....                                                   | 21                 |
| Timberlake Industries, Inc., Warren, Maine .....                                             | 21                 |
| Tonnage report .....                                                                         | 24                 |
| Town & Country Products, Jersey City, N.J. ....                                              | 21                 |
| Unexcelled Chemical Corp., Cranbury, N.J. ....                                               | 70                 |
| Union Wadding Co., Pawtucket, R.I. ....                                                      | 84                 |
| Universal Chemical Co., Inc., West Lynn, Mass. ....                                          | 21, 70             |
| U. S. Phosphoric Products Div., Tennessee Corp., Tampa,<br>Fla. ....                         | 21, 37             |
| United States Steel Corp., Pittsburgh, Pa. ....                                              | 21                 |
| Urea .....                                                                                   | 30                 |
| Valley Feed & Supply Co., Inc., Spring Valley, N.Y. ....                                     | 21                 |
| Vittner's Garden Center, Manchester, Conn. ....                                              | 21                 |
| Walker-Gordon Laboratory Co., Plainsboro, N.J. ....                                          | 22, 74, 84         |
| Warner, Oscar F., Waterbury, Conn. ....                                                      | 22, 70             |
| Whitney Seed Co., Inc., Buffalo, N.Y. ....                                                   | 22, 70             |
| Wilbur-Ellis Co., New York, N.Y. ....                                                        | 42, 84             |
| Williamson, Garfield, Inc., Jersey City, N.J. ....                                           | 22, 70             |
| Wilson, Andrew, Inc., Springfield, N.J. ....                                                 | 22                 |
| Wirthmore Stores, Inc., Waltham, Mass. ....                                                  | 22, 70             |
| Woodruff, S. D., & Sons of Wethersfield, Inc., Wethersfield,<br>Conn. ....                   | 22, 70             |





